R-MAMMA1002820//ESTs//5.0e-14:192:74//Hs.134635:AA226260

R-MAMMA1002830//EST//4.0e-50:255:97//Hs.160674:AI248319

R-MAMMA1002833//EST//1.2e-48:306:88//Hs.149580:AI281881

R-MAMMA1002835

R-MAMMA1002838//EST//2.7e-12:161:76//Hs.163252:AA828723

R-MAMMA1002842//ESTs//1.7e-41:366:78//Hs.141899:N22395

R-MAMMA1002843//Von Hippel-Lindau syndrome//8.8e-38:258:79//Hs.78160:AF0 10238

R-MAMMA1002844//ESTs//3.5e-51:250:99//Hs.151445:AA351081

R-MAMMA1002858//H.sapiens ERF-1 mRNA 3' end//9.0e-101:361:91//Hs.85155:X 79067

R-MAMMA1002868//ESTs//2.1e-38:301:80//Hs.132717:AA171941

R-MAMMA1002871//EST//6.0e-88:413:99//Hs.149057:AI243592

R-MAMMA1002880//ESTs//6.5e-100:506:96//Hs.163533:N52194

R-MAMMA1002881//EST//1.1e-40:335:80//Hs.160895:AI365871

R-MAMMA1002886//Small inducible cytokine A5 (RANTES)//3.4e-36:228:88//Hs .155464:AF088219

R-MAMMA1002887//ESTs//4.7e-87:409:99//Hs.152155:AA424811

R-MAMMA1002890//ESTs, Weakly similar to coded for by C. elegans cDNA CEE

SB82F [C.elegans] //4.2e-92:438:99//Hs.155871:AA533783

R-MAMMA1002892//Homo sapiens EVI5 homolog mRNA, complete cds//4.9e-62:32

2:80//Hs.26929:AF008915

R-MAMMA1002895//ESTs//2.7e-32:330:76//Hs.139132:AA211087

R-MAMMA1002908//Calcium modulating ligand//4.6e-48:313:86//Hs.13572:AF06

R-MAMMA1002909//Human mRNA for KIAA0180 gene, partial cds//3.4e-09:132:7

6//Hs.90981:D80002

R-MAMMA1002930//EST//4.9e-44:260:91//Hs.149580:AI281881

R-MAMMA1002938

R-MAMMA1002941//Human Line-1 repeat mRNA with 2 open reading frames//1.1

e-83:556:85//Hs.23094:M19503

R-MAMMA1002947//ESTs//7.0e-22:222:80//Hs.103395:T79243

R-MAMMA1002964//Human mRNA for KIAA0355 gene, complete cds//1.6e-44:427:

77//Hs.153014:AB002353

R-MAMMA1002970//Thromboxane A2 receptor//7.9e-48:300:84//Hs.89887:D38081

R-MAMMA1002972//ESTs, Weakly similar to KIAA0371 [H.sapiens]//9.6e-104:5

25:95//Hs.94396:AA399630

R-MAMMA1002973//ESTs//4.4e-40:257:87//Hs.163580:H15835

R-MAMMA1002982//ESTs//2.5e-28:115:87//Hs.141694:W15279

R-MAMMA1002987//Homo sapiens DNA fragmentation factor 40 kDa subunit (DF

F40) mRNA, complete cds//2.1e-41:402:67//Hs.133089:AF064019

R-MAMMA1003003//Calcium modulating ligand//1.9e-45:380:79//Hs.13572:AF06

R-MAMMA1003004//ESTs//3.0e-07:378:60//Hs.61885:AI127857

R-MAMMA1003007//ESTs//2.0e-47:404:80//Hs.146314:R99617

R-MAMMA1003011//ESTs, Highly similar to HISTONE MACRO-H2A.1 [Rattus nor

vegicus] //1.4e-53:320:90//Hs.92023:AI022248

R-MAMMA1003015//ESTs//1.5e-42:363:79//Hs.155184:AA573189

R-MAMMA1003019//ESTs//4.8e-10:232:66//Hs.111341:AA251268

R-MAMMA1003026//ESTs//2.3e-83:394:99//Hs.24668:AA897315

R-MAMMA1003031//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING

ENTRY !!!! [H.sapiens] //3.5e-27:257:77//Hs.96337:AA225358

R-MAMMA1003035//ESTs//1.3e-94:481:94//Hs.92411:AA603321

R-MAMMA1003039//EST//0.56:210:61//Hs.162248:AA552160

R-MAMMA1003040//ESTs//2.1e-17:261:70//Hs.46980:W55940

R-MAMMA1003044//EST//2.4e-18:124:91//Hs.130321:AI002941

R-MAMMA1003047//ESTs//1.0e-20:209:78//Hs.15916:H12862

R-MAMMA1003049//14-3-3 PROTEIN SIGMA//0.94:184:60//Hs.2510:X57348

R-MAMMA1003055//EST//1.0e-49:281:92//Hs.149580:AI281881

R-MAMMA1003056//ESTs//0.99:107:66//Hs.30348:AI038559

R-MAMMA1003057//ESTs, Highly similar to hypothetical protein MD6 [M.musc

ulus]//1.1e-102:545:93//Hs.13755:AA878911

R-MAMMA1003066//H.sapiens mRNA for urea transporter//8.1e-45:322:83//Hs.

66710:X96969

R-MAMMA1003089//ESTs, Weakly similar to !!!! ALU SUBFAMILY SQ WARNING EN

TRY !!!! [H.sapiens] //1.4e-34:421:70//Hs.161959:AA493652

R-MAMMA1003099//ESTs//1.1e-43:379:79//Hs.37573:H59651

R-MAMMA1003104//ESTs//2.1e-97:498:96//Hs.9299:T51283

R-MAMMA1003113//EST//3.7e-29:457:70//Hs.123616:AA815366

R-MAMMA1003127//ESTs//2.6e-41:283:86//Hs.146811:AA410788

R-MAMMA1003135//ESTs//7.2e-101:504:97//Hs.87729:AA863125

R-MAMMA1003140//ESTs//4.3e-44:200:89//Hs.152093:AI149537

R-MAMMA1003146//Wingless-type MMTV integration site 5A, human homolog//0

.020:413:61//Hs.152213:L20861

R-MAMMA1003150

R-MAMMA1003166//ESTs, Moderately similar to PEANUT PROTEIN [Drosophila

melanogaster]//2.0e-87:524:89//Hs.6884:W30736

R-NT2RM2002580//Homo sapiens clone 24781 mRNA sequence//1.6e-111:587:94/

/Hs.108112:AF070640

R-NT2RM4000024//ESTs//2.9e-98:523:94//Hs.26641:R59312

R-NT2RM4000027

R-NT2RM4000030//ESTs//1.6e-96:482:96//Hs.90625:T03663

R-NT2RM4000046//ESTs//1.6e-91:461:97//Hs.151237:AI186169

R-NT2RM4000061//ESTs//4.3e-31:167:97//Hs.110821:Z78379

R-NT2RM4000085//Homo sapiens clone 24700 unknown mRNA, partial cds//4.0e

-113:549:97//Hs.95665:AF070639

R-NT2RM4000086//EST//2.7e-17:212:76//Hs.137041:AA877817

R-NT2RM4000104//ESTs//3.0e-85:452:94//Hs.101750:H19708

R-NT2RM4000139//EST//3.3e-05:156:66//Hs.133228:AI052312

R-NT2RM4000155//ESTs, Moderately similar to THREONYL-TRNA SYNTHETASE, CY

TOPLASMIC [H.sapiens] //1.9e-99:536:92//Hs.127810:AI246301

R-NT2RM4000156//EST//0.89:169:62//Hs.162967:AA676397

R-NT2RM4000167//ESTs//1.0:214:61//Hs.119370:W52962

R-NT2RM4000169//ESTs//5.4e-82:440:93//Hs.159379:AI382160

R-NT2RM4000191//ESTs, Weakly similar to P68 PROTEIN [H.sapiens] //4.1e-99:542:93//Hs.6366:AA614113

R-NT2RM4000197//ESTs//5.4e-113:567:96//Hs.22975:AA156723

R-NT2RM4000199//ESTs//0.020:95:65//Hs.146203:AI254528

R-NT2RM4000200//ESTs//1.4e-100:488:97//Hs.126538:AA931876

R-NT2RM4000202//Small inducible cytokine A5 (RANTES)//4.3e-37:330:77//Hs .155464:AF088219

R-NT2RM4000210//Homo sapiens mRNA for KIAA0712 protein, complete cds//1.

7e-103:546:94//Hs.111138:AB018255

R-NT2RM4000215

R-NT2RM4000229//ESTs//7.1e-92:457:97//Hs.162074:AA477760

R-NT2RM4000233//Fms-related tyrosine kinase 1 (vascular endothelial grow th factor/vascular permeability factor receptor)//0.00020:174:66//Hs.235:X51602

R-NT2RM4000244//ESTs//6.6e-61:320:95//Hs.108646:AA613031

R-NT2RM4000251//Homo sapiens mRNA for TRIP6 (thyroid receptor interacting

g protein)//0.63:219:62//Hs.119498:AF000974

R-NT2RM4000265//ESTs//8.8e-105:489:99//Hs.131001:AI378742

R-NT2RM4000290//ESTs//4.0e-87:435:96//Hs.162592:AA594128

R-NT2RM4000324//ESTs//2.2e-80:413:96//Hs.12313:R43673

R-NT2RM4000327//Small inducible cytokine A5 (RANTES)//3.2e-45:286:87//Hs

.155464:AF088219

R-NT2RM4000344//Clathrin, light polypeptide (Lcb)//8.6e-60:452:84//Hs.73

919:X81637

R-NT2RM4000349//ESTs, Weakly similar to KIAA0005 [H.sapiens]  $\frac{1}{2.5}$ e-117:5

79:96//Hs.5216:AA534881

R-NT2RM4000354//ESTs//2.1e-85:406:99//Hs.126774:AI224479

R-NT2RM4000356//ESTs//7.9e-109:548:96//Hs.44278:AA418063

R-NT2RM4000366//Homo sapiens mRNA for KIAA0642 protein, partial cds//2.8

e-113:577:95//Hs.8152:AB014542

R-NT2RM4000368//ESTs//2.2e-61:310:97//Hs.143611:M78140

R-NT2RM4000386//ESTs, Weakly similar to tenascin-like protein [D.melanog

aster]//1.0e-93:521:92//Hs.41793:AA775879

R-NT2RM4000395//ESTs, Highly similar to HYPOTHETICAL 52.9 KD PROTEIN IN

SAP155-YMR31 INTERGENIC REGION [Saccharomyces cerevisiae] //1.9e-99:524:

94//Hs.5249:U55977

R-NT2RM4000414//EST//2.7e-06:196:64//Hs.136648:AA688285

R-NT2RM4000421//ESTs, Weakly similar to No definition line found [C.eleg

ans]//5.4e-75:470:90//Hs.69235:AA192359

R-NT2RM4000425//H.sapiens mRNA for MACH-alpha-2 protein//0.17:112:69//Hs

.19949:X98173

R-NT2RM4000433//ESTs//2.7e-100:479:98//Hs.24553:AI150687

R-NT2RM4000457//ESTs//5.1e-107:535:95//Hs.7579:AA775865

R-NT2RM4000471//ESTs, Highly similar to NIFS-LIKE 54.5 KD PROTEIN [Sacc

haromyces cerevisiae] //6.0e-99:492:96//Hs.21090:AA418587

R-NT2RM4000486//ESTs, Moderately similar to unnamed protein product [H.s

apiens] //2.2e-102:493:97//Hs.111279:W84558

R-NT2RM4000496

R-NT2RM4000511//EST//5.1e-43:326:81//Hs.157658:AI358465

R-NT2RM4000514//ESTs//1.7e-112:552:96//Hs.6686:AA205496

R-NT2RM4000515//ESTs, Weakly similar to HYPOTHETICAL 85.0 KD PROTEIN IN

CPA2-ATP2 INTERGENIC REGION [Saccharomyces cerevisiae] //1.4e-60:343:93//

Hs.16014: AA074879

R-NT2RM4000520//ESTs//2.7e-55:266:100//Hs.99838:AA204731

R-NT2RM4000531//ESTs//2.0e-88:502:91//Hs.13110:T67461

R-NT2RM4000532//ESTs//0.47:290:58//Hs.148753:T91777

R-NT2RM4000534//EST//0.00025:303:60//Hs.162809:AA632198

R-NT2RM4000585//EST//0.28:63:77//Hs.150024:AI291981

R-NT2RM4000590//ESTs//5.8e-65:320:98//Hs.116017:AA613437

R-NT2RM4000595//Homo sapiens KIAA0431 mRNA, partial cds//0.99:189:64//Hs .16349:AB007891

R-NT2RM4000603//ESTs//4.6e-68:356:96//Hs.48855:AA134589

R-NT2RM4000611//ESTs//1.5e-89:431:97//Hs.26117:W16697

R-NT2RM4000616//ESTs, Highly similar to ACETYL-COENZYME A SYNTHETASE [E

scherichia coli]//1.4e-102:519:96//Hs.14779:N64822

R-NT2RM4000674//ESTs//5.1e-78:398:97//Hs.8268:N70144

R-NT2RM4000689//ESTs, Weakly similar to T01G9.4 [C.elegans] //2.9e-115:55

0:98//Hs.11820:AA205531

R-NT2RM4000698//ESTs//2.0e-17:130:87//Hs.86420:AA927510

R-NT2RM4000700

R-NT2RM4000712//EST//0.99:103:65//Hs.114039:AA701128

R-NT2RM4000717//ESTs, Highly similar to BONE MORPHOGENETIC PROTEIN 1 PR

ECURSOR [Mus musculus] //2.2e-103:519:95//Hs.6823:W18181

R-NT2RM4000733//ESTs//8.7e-88:429:98//Hs.72185:AA465311

R-NT2RM4000734//Homo sapiens mRNA for KIAA0760 protein, partial cds//3.6

e-105:536:95//Hs.137168:AB018303

R-NT2RM4000741//ESTs//0.99:266:58//Hs.142718:AA034046

R-NT2RM4000751//ESTs//1.6e-20:351:66//Hs.43145:AA776988

R-NT2RM4000764

R-NT2RM4000778//EST//0.066:254:61//Hs.148232:AA904174

R-NT2RM4000779//Homo sapiens mRNA for KIAA0451 protein, complete cds//9.

3e-106:546:94//Hs.18586:AB007920

R-NT2RM4000787//Human melanoma antigen recognized by T-cells (MART-1) mR

NA//6.5e-40:424:73//Hs.154069:U06452

R-NT2RM4000790//EST//9.0e-48:259:94//Hs.159694:AI417008

R-NT2RM4000795//Human mRNA for KIAA0067 gene, complete cds//1.0:203:63//

Hs.20991:D31891

R-NT2RM4000796//ESTs//7.0e-106:506:98//Hs.43559:A1003520

R-NT2RM4000798//Human polymorphic epithelial mucin core protein mRNA, 3' end//2.5e-28:158:96//Hs.118249:M21868

R-NT2RM4000813

R-NT2RM4000820//ESTs, Weakly similar to hypothetical protein [H.sapiens] //1.3e-109:539:97//Hs.99636:AI219667

 $R-NT2RM4000833//ESTs,\ Moderately\ similar\ to\ ZK863.3\ [C.elegans]\ //4.0e-11$ 

2:448:99//Hs.20223:AA482031

R-NT2RM4000848//ESTs//8.1e-97:476:97//Hs.16036:AA883864

R-NT2RM4000852//ESTs//6.4e-94:467:97//Hs.11556:AI309597

R-NT2RM4000855//ESTs//2.9e-95:544:90//Hs.106525:AI283343

R-NT2RM4000887

R-NT2RM4000895//ESTs, Moderately similar to !!!! ALU SUBFAMILY SQ WARNIN

G ENTRY !!!! [H.sapiens] //9.3e-96:450:99//Hs.142076:AA604514

R-NT2RM4000950//ESTs//2.6e-91:438:98//Hs.43827:AA455262

R-NT2RM4000971//EST//2.9e-96:461:99//Hs.139709:AA227887

R-NT2RM4000979//EST//1.6e-67:329:98//Hs.96927:AA349647

R-NT2RM4000996//ESTs, Weakly similar to ZINC FINGER PROTEIN 91 [H.sapien

s]//1.7e-82:414:96//Hs.115342:AA650126

 $R-NT2RM4001002//Homo\ sapiens\ mRNA\ for\ KIAA0729\ protein,\ partial\ cds//3.8$ 

e-114:545:97//Hs.19542:AB018272

R-NT2RM4001016//Homo sapiens mRNA for KIAA0639 protein, partial cds//2.5

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e-114:556:97//Hs.15711:AB014539
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R-NT2RM4001032//ESTs//7.8e-17:132:84//Hs.138720:N53352

R-NT2RM4001047//Homo sapiens UKLF mRNA for ubiquitous Kruppel like facto

r, complete cds//0.42:133:67//Hs.32170:AB015132

R-NT2RM4001054//ESTs//1.7e-84:404:99//Hs.116407:AA815300

R-NT2RM4001084//ESTs//3.4e-91:439:99//Hs.103177:W72798

R-NT2RM4001092//ESTs//1.4e-86:517:89//Hs.132969:Z78324

R-NT2RM4001116//EST//5.2e-57:275:100//Hs.131115:AI016962

R-NT2RM4001140//ESTs//5.5e-96:461:98//Hs.86965:AA252276

R-NT2RM4001151//ESTs//0.40:263:58//Hs.113189:R08311

R-NT2RM4001155//ESTs//8.3e-105:544:94//Hs.29647:W60848

R-NT2RM4001160//EST//7.6e-25:380:68//Hs.147405:AI209085

R-NT2RM4001187//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNIN

G ENTRY !!!! [H.sapiens] //9.2e-43:273:91//Hs.109005:N31174

R-NT2RM4001191//Cytochrome P450, 51 (lanosterol 14-alpha-demethylase)//3

.1e-32:274:70//Hs.2379:U23942

R-NT2RM4001200//ESTs//4.5e-102:494:97//Hs.31844:N32849

R-NT2RM4001203

R-NT2RM4001204//ESTs//9.8e-88:468:93//Hs.4990:T65307

R-NT2RM4001217//ESTs//1.2e-75:396:94//Hs.25042:R72410

R-NT2RM4001256//ESTs//1.0:157:62//Hs.65377:AA994677

R-NT2RM4001258//ESTs//9.6e-41:260:88//Hs.27633:N76184

R-NT2RM4001309

R-NT2RM4001313//EST//0.0022:150:66//Hs.161573:W84857

R-NT2RM4001316//ESTs//3.5e-26:139:99//Hs.23100:AI128899

R-NT2RM4001320//ESTs//1.6e-97:308:99//Hs.112024:AI042352

R-NT2RM4001340//ESTs, Highly similar to UTR4 PROTEIN [Saccharomyces cer

evisiae] //1.9e-105:522:97//Hs.18442:AI129307

R-NT2RM4001344//EST//1.1e-90:436:99//Hs.95900:AA160339

R-NT2RM4001347//EST//0.17:186:61//Hs.16751:T90476

R-NT2RM4001371//EST//0.0069:270:62//Hs.99239:AA450211

R-NT2RM4001382

R-NT2RM4001384//ESTs//9.6e-91:445:98//Hs.55000:AA805507

R-NT2RM4001410//EST//0.13:50:82//Hs.157675:AI358790

R-NT2RM4001411//ESTs, Weakly similar to lymphocyte specific adaptor prot

ein Lnk [M.musculus] //4.0e-102:539:94//Hs.15744:AI055859

R-NT2RM4001412

R-NT2RM4001414//ESTs//6.5e-35:226:88//Hs.121727:AA775895

R-NT2RM4001437//EST//0.017:169:67//Hs.13207:F10054

R-NT2RM4001444//ESTs, Weakly similar to ISOLEUCYL-TRNA SYNTHETASE, MITOC

HONDRIAL [S.cerevisiae] //7.4e-108:544:94//Hs.7558:AA526812

R-NT2RM4001454//ESTs//4.7e-108:517:98//Hs.32295:N32277

R-NT2RM4001455//EST//9.6e-81:395:97//Hs.127978:AA969739

R-NT2RM4001483//Human mRNA for KIAA0033 gene, partial cds//1.8e-58:324:8

5//Hs.22271:D26067

R-NT2RM4001489//Homo sapiens mRNA for KIAA0685 protein, complete cds//7.

0e-104:547:93//Hs.153121:AB014585

R-NT2RM4001519//Histatin 1//0.53:340:59//Hs.119101:M26664

R-NT2RM4001522//Small inducible cytokine A5 (RANTES)//8.4e-55:306:80//Hs

.155464:AF088219

R-NT2RM4001557//ESTs, Weakly similar to F11A10.4 [C.elegans]//6.1e-21:16

5:83//Hs.29134:H43072

R-NT2RM4001565//ESTs//2.0e-103:483:99//Hs.121273:AA758027

R-NT2RM4001566//Human DNA sequence from clone 1409 on chromosome Xp11.1-

11.4. Contains a Inter-Alpha-Trypsin Inhibitor Heavy Chain LIKE gene, a

alternatively spliced Melanoma-Associated Antigen MAGE LIKE gene and a 6

-Phosphofructo-2-kinase (Fructose-2,6-bisphosphatase) LIKE pseudogene. C

ontains ESTs, STSs and genomic marker DXS8032//2.7e-43:446:72//Hs.4943:Z

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98046
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R-NT2RM4001569//ESTs//3.6e-37:186:100//Hs.86959:AA888009

R-NT2RM4001582//ESTs//1.2e-96:459:98//Hs.114432:N52946

R-NT2RM4001592

R-NT2RM4001594//ESTs//1.6e-83:404:98//Hs.134740:AA282171

R-NT2RM4001597//ESTs//6.9e-111:558:96//Hs.11408:AI358871

R-NT2RM4001605//Homo sapiens mRNA for KIAA0791 protein, complete cds//2.

1e-112:565:95//Hs.23255:AB018334

R-NT2RM4001611//EST//5.9e-74:353:99//Hs.125318:AA837079

R-NT2RM4001629//ESTs//6.1e-95:453:99//Hs.115765:AA485957

R-NT2RM4001650

R-NT2RM4001662

R-NT2RM4001666//Homo sapiens mRNA for KIAA0469 protein, complete cds//3.

6e-36:230:70//Hs.7764:AB007938

R-NT2RM4001682//EST//4.3e-68:393:90//Hs.157362:AI367496

R-NT2RM4001710//ESTs//4.3e-48:235:99//Hs.7299:AA203440

R-NT2RM4001714//ESTs//0.0014:568:58//Hs.50458:AA868686

R-NT2RM4001715//ESTs//6.5e-104:487:99//Hs.153581:AA630465

R-NT2RM4001731//ESTs, Weakly similar to No definition line found [C.eleg

ans]//3.1e-108:563:94//Hs.18510:AA522887

R-NT2RM4001741//T3 receptor-associating cofactor-1 [human, fetal liver,

mRNA, 2930 nt]//0.083:124:68//Hs.120980:S83390

R-NT2RM4001746//ESTs//6.1e-90:420:100//Hs.139003:AA948200

R-NT2RM4001754//Human kpni repeat mrna (cdna clone pcd-kpni-4), 3' end//

5.4e-59:504:78//Hs.139107:K00629

R-NT2RM4001758//ESTs//8.9e-27:140:100//Hs.149973:AI290740

R-NT2RM4001776//Homo sapiens mRNA for KIAA0727 protein, partial cds//6.4

e-24:236:80//Hs.39871:AB018270

R-NT2RM4001783//ESTs//9.9e-30:156:99//Hs.115260:AA314956

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R-NT2RM4001810//ESTs//1.3e-65:346:95//Hs.131915:W22567
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R-NT2RM4001813//ESTs//5.7e-102:473:100//Hs.87574:AI089920

R-NT2RM4001823//ESTs//3.8e-62:324:95//Hs.124109:AA888839

R-NT2RM4001828//ESTs//1.3e-119:563:98//Hs.102397:AA706551

R-NT2RM4001836//ESTs//5.5e-16:92:100//Hs.26996:AA551070

R-NT2RM4001841//ESTs//1.3e-99:540:94//Hs.42322:AA082619

R-NT2RM4001842//ESTs, Weakly similar to !!!! ALU SUBFAMILY SQ WARNING EN

TRY !!!! [H.sapiens] //4.1e-10:274:62//Hs.161959:AA493652

R-NT2RM4001856//ESTs, Weakly similar to contains similarity to ATP/GTP-b

inding site motif [C.elegans] //3.0e-43:292:86//Hs.14202:N46000

R-NT2RM4001858//ESTs//6.2e-104:495:98//Hs.118686:AA682280

R-NT2RM4001865//Homo sapiens mRNA for atopy related autoantigen CALC//1.

6e-120:592:97//Hs.61628:Y17711

R-NT2RM4001876//ESTs//2.9e-98:532:92//Hs.100734:AA158252

R-NT2RM4001880//ESTs//2.5e-29:224:86//Hs.6193:AA045149

R-NT2RM4001905//ESTs//5.6e-109:565:95//Hs.9536:AA114178

R-NT2RM4001922//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT

RY !!!! [H.sapiens] //1.2e-105:535:95//Hs.30991:AA994438

R-NT2RM4001930//ESTs//4.1e-84:425:96//Hs.80042:N63143

R-NT2RM4001938//EST//0.00040:241:60//Hs.147235:AI205893

R-NT2RM4001940//Homo sapiens timeless homolog mRNA, complete cds//2.0e-1

10:556:95//Hs.118631:AF098162

R-NT2RM4001953//ESTs//5.3e-65:338:96//Hs.33718:AA453268

R-NT2RM4001965//ESTs, Weakly similar to T14B4.2 gene product [C.elegans]

//5.7e-62:326:95//Hs.3385:N25917

R-NT2RM4001969//ESTs, Weakly similar to IP63 protein [R.norvegicus]//1.9

e-21:121:98//Hs.8772:AA521097

R-NT2RM4001979//ESTs//1.4e-96:465:98//Hs.157103:W60265

R-NT2RM4001984

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R-NT2RM4001987
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R-NT2RM4002013//EST//2.2e-14:110:90//Hs.160835:AI345528

R-NT2RM4002018

R-NT2RM4002034//Human mRNA for KIAA0118 gene, partial cds//9.4e-46:293:8

7//Hs.154326:D42087

R-NT2RM4002044//ESTs//2.8e-107:537:96//Hs.24078:W44435

R-NT2RM4002054//ESTs//3.7e-88:482:94//Hs.4243:T78226

R-NT2RM4002062//ESTs//1.4e-55:377:85//Hs.152592:AA587887

R-NT2RM4002063//Calcium modulating ligand//1.8e-43:385:78//Hs.13572:AF06

8179

R-NT2RM4002066//Homo sapiens OPA-containing protein mRNA, complete cds//

5.5e-42:554:68//Hs.85313:AF071309

R-NT2RM4002067//Human kpni repeat mrna (cdna clone pcd-kpni-4), 3' end//

2.3e-43:468:73//Hs.139107:K00629

R-NT2RM4002073//ESTs, Weakly similar to very-long-chain acyl-CoA synthet

ase [H.sapiens] //6.8e-57:290:96//Hs.109274:AA193416

R-NT2RM4002075//ESTs//0.078:267:61//Hs.163563:AA641655

R-NT2RM4002093//ESTs//1.2e-64:316:99//Hs.34956:AI052528

R-NT2RM4002109//ESTs//1.0:95:69//Hs.25897:W65409

R-NT2RM4002128//Homo sapiens mRNA for BCL9 gene//0.51:258:60//Hs.122607:

Y13620

R-NT2RM4002140//ESTs//5.5e-46:187:94//Hs.8737:W22712

R-NT2RM4002145//ESTs//4.6e-70:374:94//Hs.141082:H18987

R-NT2RM4002146//ESTs//1.9e-93:439:99//Hs.119295:AA442090

R-NT2RM4002161//Homo sapiens laforin (EPM2A) mRNA, partial cds//1.5e-111

:560:96//Hs.22464:AF084535

R-NT2RM4002174//Homo sapiens LIM protein mRNA, complete cds//3.2e-46:552

:72//Hs.154103:AF061258

R-NT2RM4002189//ESTs//9.6e-75:352:100//Hs.98350:H15400

R-NT2RM4002194//EST//0.22:68:72//Hs.149104:AI244343

R-NT2RM4002205//EST//0.00028:103:72//Hs.130032:AA897678

R-NT2RM4002213//ESTs//3.3e-15:160:78//Hs.63304:W22079

R-NT2RM4002226//ESTs, Highly similar to GTPASE ACTIVATING PROTEIN ROTUN

D [Drosophila melanogaster] //5.1e-112:569:95//Hs.23900:U82984

R-NT2RM4002251//ESTs, Weakly similar to similar to alpha-1,3-mannosyl-gl

ycoprotein beta-1, 2-N-acetylglucosaminyltransferase [C.elegans] //1.1e-1

00:544:93//Hs.27567:W72190

R-NT2RM4002256//Small inducible cytokine A5 (RANTES)//1.0e-44:341:81//Hs

.155464:AF088219

R-NT2RM4002266//ESTs//2.6e-100:539:93//Hs.57976:AA535864

R-NT2RM4002278//ESTs//1.8e-112:569:95//Hs.87281:AA128263

R-NT2RM4002281//ESTs//4.9e-20:187:80//Hs.141203:H52638

R-NT2RM4002287//ESTs//7.9e-84:388:94//Hs.33977:N52461

R-NT2RM4002294

R-NT2RM4002301//ESTs//4.5e-111:556:96//Hs.85916:AA194164

R-NT2RM4002323//ESTs//4.5e-102:498:97//Hs.85782:AA191498

R-NT2RM4002339//ESTs//5.0e-59:283:100//Hs.125048:AA682913

R-NT2RM4002344//V-akt murine thymoma viral oncogene homolog 2//0.29:153:

66//Hs.155129:M77198

R-NT2RM4002373//Homo sapiens mRNA for KIAA0649 protein, complete cds//2.

8e-122:593:97//Hs.26163:AB014549

R-NT2RM4002374//ESTs//3.3e-40:505:70//Hs.95115:AA206594

R-NT2RM4002383//ESTs//2.7e-93:455:97//Hs.134278:AA648884

R-NT2RM4002390//ESTs//3.3e-93:481:95//Hs.48764:AA613328

R-NT2RM4002409//ESTs, Weakly similar to coded for by C. elegans cDNA yk5

2e10.5 [C.elegans] //1.3e-97:473:98//Hs.16464:W19606

R-NT2RM4002438//ESTs//0.74:162:61//Hs.65377:AA994677

R-NT2RM4002446

R-NT2RM4002452//EST//1.0:164:60//Hs.116619:AA668142

R-NT2RM4002457

R-NT2RM4002460//ESTs//3.0e-74:385:96//Hs.6933:R07890

R-NT2RM4002479//Homo sapiens RNA helicase-related protein mRNA, complete cds//1.6e-103:507:97//Hs.8765:AF083255

R-NT2RM4002482//Homo sapiens mRNA for KIAA0691 protein, complete cds//2.

3e-32:172:98//Hs.94781:AB014591

R-NT2RM4002493//ESTs//6.4e-73:366:97//Hs.157114:T58884

R-NT2RM4002499//ESTs//3.5e-61:307:97//Hs.117737:AI088029

R-NT2RM4002504//ESTs//2.1e-55:306:94//Hs.10949:AA464464

R-NT2RM4002527//ESTs, Weakly similar to peroxisome targeting signal 2 re

ceptor [H.sapiens] //1.4e-73:360:91//Hs.31030:H50467

R-NT2RM4002532//ESTs//1.3e-21:191:78//Hs.146811:AA410788

R-NT2RM4002534//ESTs//1.8e-99:512:95//Hs.13526:A1417057

R-NT2RM4002567//ESTs//7.6e-41:272:87//Hs.7114:R24312

R-NT2RM4002571//ESTs, Highly similar to POLYPEPTIDE N-ACETYLGALACTOSAMI

NYLTRANSFERASE [Bos taurus] //2.3e-89:435:97//Hs.15830:AA165698

R-NT2RM4002593//ESTs//2.3e-109:552:96//Hs.17424:AA190569

R-NT2RM4002623//ESTs, Weakly similar to ASPARTYL-TRNA SYNTHETASE [Thermu

s aquaticus thermophilus]//9.6e-28:194:87//Hs.59346:AI126802

R-NT2RP2000001//ESTs//2.6e-80:386:99//Hs.105061:N45096

R-NT2RP2000006//Thromboxane A2 receptor//7.2e-37:253:84//Hs.89887:D38081

R-NT2RP2000008//Zinc finger protein 37a (KOX 21)//5.2e-25:366:67//Hs.544

88:X69115

R-NT2RP2000027//ESTs//9.5e-74:377:96//Hs.96557:AA286713

R-NT2RP2000040//Homo sapiens mRNA for KIAA0747 protein, partial cds//2.7

e-42:223:96//Hs.8309:AB018290

R-NT2RP2000045//Homo sapiens tumorous imaginal discs protein Tid56 homolog (TID1) mRNA, complete cds//4.3e-64:309:98//Hs.6216:AF061749

R-NT2RP2000054//EST//1.2e-71:375:96//Hs.98835:AA435798

R-NT2RP2000056//EST//2.8e-28:342:69//Hs.135526:AI094910

R-NT2RP2000067//ESTs, Weakly similar to tenascin-like protein [D.melanog aster]//2.3e-35:199:94//Hs.41793:AA775879

R-NT2RP2000070//ESTs, Weakly similar to proto-cadherin 3 [R.norvegicus] / 1.4e-78:383:98//Hs.58254:W72881

R-NT2RP2000076//EST//0.0014:227:63//Hs.136761:AA738097

R-NT2RP2000077//Homo sapiens growth arrest specific 11 (GAS11) mRNA, complete cds//1.1e-78:379:97//Hs.54877:AF050078

R-NT2RP2000079//Homo sapiens RET finger protein-like 1 antisense transcr ipt, partial//2.9e-21:232:75//Hs.102576:AJ010230

R-NT2RP2000088//Homo sapiens mRNA for KIAA0795 protein, partial cds//1.8 e-75:378:96//Hs.22926:AB018338

R-NT2RP2000091//Carcinoembryonic antigen gene family member 6//0.030:236:63//Hs.41:D90064

R-NT2RP2000097//ESTs//4.2e-15:92:97//Hs.7432:AA281757

R-NT2RP2000098//ESTs//9.0e-53:279:94//Hs.87807:AA813827

R-NT2RP2000108//EST//1.5e-75:378:96//Hs.162105:AA524419

R-NT2RP2000114//Homo sapiens mRNA for GM3 synthase, complete cds//5.8e-7. 6:386:95//Hs.17706:AB018356

R-NT2RP2000120//ESTs, Weakly similar to HYPOTHETICAL 68.7 KD PROTEIN ZK7

57.1 IN CHROMOSOME III [C.elegans] //1.9e-19:153:86//Hs.5268:W22670

R-NT2RP2000126//ESTs//1.0e-55:293:95//Hs.14570:AI422099

R-NT2RP2000133//ESTs//0.24:354:59//Hs.157564:AI356513

R-NT2RP2000147//ESTs, Highly similar to CLATHRIN COAT ASSEMBLY PROTEIN

AP47 [Mus musculus] //3.0e-89:457:95//Hs.3832:AI208601

R-NT2RP2000153//EST//0.0039:93:68//Hs.140386:AA773548

R-NT2RP2000157//ESTs//1.1e-53:322:91//Hs.6877:AA040820

R-NT2RP2000161//ESTs//1.6e-99:492:97//Hs.21738:AI188190

R-NT2RP2000175//ESTs//1.4e-98:489:96//Hs.4849:AI143741

R-NT2RP2000183//ESTs//9.0e-72:358:96//Hs.4856:N51373

R-NT2RP2000195//ESTs//3.9e-92:439:98//Hs.145091:AA814510

R-NT2RP2000205//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING

ENTRY !!!! [H.sapiens] //1.4e-80:415:95//Hs.11807:T86897

R-NT2RP2000224//RNA polymerase II, polypeptide C (33kD)//1.1e-57:306:94/

/Hs.79402:AC004382

R-NT2RP2000232

R-NT2RP2000233//ESTs//1.1e-08:63:96//Hs.124861:AI090683

R-NT2RP2000239//ESTs//5.3e-87:427:96//Hs.86211:AA604379

R-NT2RP2000248//ESTs, Weakly similar to 0-linked GlcNAc transferase [H.s

apiens] //1.3e-95:454:99//Hs.102057:AA649005

R-NT2RP2000257//ESTs//5.1e-58:282:99//Hs.122565:AI126840

R-NT2RP2000258//EST//1.0:67:68//Hs.61812:AA035649

R-NT2RP2000270//ESTs, Weakly similar to LINE-1 REVERSE TRANSCRIPTASE HOM

OLOG [Homo sapiens] //8.4e-59:298:96//Hs.16085:AI261382

R-NT2RP2000274//ESTs//7.5e-61:296:98//Hs.86081:AA196635

R-NT2RP2000288//ESTs//1.8e-56:305:93//Hs.7579:AA775865

R-NT2RP2000289

R-NT2RP2000297//ESTs, Highly similar to MKR2 PROTEIN [Mus musculus]//9.

8e-106:494:99//Hs.102951:AA574249

R-NT2RP2000298//ESTs//2.1e-62:256:90//Hs.8737:W22712

R-NT2RP2000310//Human proline dehydrogenase/proline oxidase (PRODH) mRNA

complete cds//2.8e-39:222:93//Hs.58218:U82381

R-NT2RP2000327//Homo sapiens DNA sequence from PAC 434014 on chromosome

1q32.3.-41. Contains the HSD11B1 gene for Hydroxysteroid (11-beta) Dehyd

rogenase 1, the ADORA2BP adenosine A2b receptor LIKE pseudogene, the IRF

6 gene for Interferon Regulatory Factor 6 and two unknown genes. Contain

s ESTs and GSSs//2.9e-71:342:98//Hs.87684:AL022398

R-NT2RP2000329//ESTs, Highly similar to GTP: AMP PHOSPHOTRANSFERASE MITO

CHONDRIAL [Bos taurus] //3.4e-69:371:94//Hs.43436:N32441

R-NT2RP2000337//ESTs//5.2e-79:411:95//Hs.101799:AI276062

R-NT2RP2000346//Homo sapiens apoptosis associated protein (GADD34) mRNA, complete cds//1.1e-47:262:94//Hs.76556:U83981

R-NT2RP2000369//ESTs//4.3e-102:531:94//Hs.15855:H98103

R-NT2RP2000414//Homo sapiens HnRNP F protein mRNA, complete cds//8.4e-09:93:83//Hs.808:L28010

R-NT2RP2000420//ESTs//8.2e-24:142:94//Hs.144893:AI222324

R-NT2RP2000422//Homo sapiens N-acetylglucosamine-phosphate mutase mRNA, complete cds//4.2e-20:140:90//Hs.5819:AF102265

R-NT2RP2000438//ESTs, Weakly similar to misato [D.melanogaster] //1.3e-65:362:93//Hs.22197:AI151425

R-NT2RP2000448//ESTs, Highly similar to HYPOTHETICAL 51.6 KD PROTEIN IN PAP1-MRPL13 INTERGENIC REGION [Saccharomyces cerevisiae] //3.6e-75:435:9 2//Hs.21938:W81045

R-NT2RP2000459//ESTs//2.8e-95:527:93//Hs.103422:AI352013

R-NT2RP2000498//ESTs//2.3e-17:119:79//Hs.161714:AA229078

R-NT2RP2000503//ESTs//5.2e-91:438:98//Hs.152335:AI290215

R-NT2RP2000510//Homo sapiens KIAA0436 mRNA, partial cds//0.13:455:58//Hs .110:AB007896

R-NT2RP2000516//ESTs//9.9e-63:376:89//Hs.47546:AA181348

R-NT2RP2000523

R-NT2RP2000603//Homo sapiens mRNA for KIAA0572 protein, partial cds//3.5

e-30:167:97//Hs.14409:AB011144

R-NT2RP2000617//ESTs//9.5e-103:493:98//Hs.9412:W72446

R-NT2RP2000634//Homo sapiens mRNA for KIAA0614 protein, partial cds//8.1

e-66:335:96//Hs.7314:AB014514

R-NT2RP2000644//ESTs//1.1e-18:372:63//Hs.82419:AA789222

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R-NT2RP2000656//ESTs//1.0e-10:128:80//Hs.23977:AA115275
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R-NT2RP2000658//ESTs//0.31:278:59//Hs.15661:W02396

R-NT2RP2000668//ESTs//8.2e-40:255:88//Hs.113310:R16767

R-NT2RP2000678//ESTs//2.6e-53:271:96//Hs.23790:N99347

R-NT2RP2000710//ESTs//0.49:190:63//Hs.145521:AI261368

R-NT2RP2000715//EST//1.2e-87:418:99//Hs.139425:AA429279

R-NT2RP2000731//EST//5.3e-65:322:97//Hs.136754:AA713965

R-NT2RP2000758//ESTs//1.0:187:61//Hs.10545:N62642

R-NT2RP2000764//ESTs//5.8e-84:485:91//Hs.121816:AA775419

R-NT2RP2000809

R-NT2RP2000812//ESTs//1.2e-45:231:97//Hs.121028:AA902745

R-NT2RP2000814//ESTs//6.3e-87:433:97//Hs.145479:AA969404

R-NT2RP2000816//ESTs//0.45:100:69//Hs.147529:AA458918

R-NT2RP2000819

R-NT2RP2000841//ESTs//1.9e-73:351:99//Hs.116385:AI224511

R-NT2RP2000842//TUMOR NECROSIS FACTOR-INDUCIBLE PROTEIN TSG-6 PRECURSOR/

/4.6e-10:247:66//Hs.29352:M31165

R-NT2RP2000845//ESTs//2.8e-91:443:97//Hs.66810:AI206552

R-NT2RP2000863//ESTs//4.3e-49:310:88//Hs.104336:W07345

R-NT2RP2000880//Homo sapiens mRNA for KIAA0741 protein, complete cds//2.

8e-43:277:89//Hs.3615:AB018284

R-NT2RP2000892//ESTs//2.8e-50:258:96//Hs.119238:AA476267

R-NT2RP2000931//MATRIN 3//7.2e-57:290:96//Hs.78825:AB018266

R-NT2RP2000938//ESTs, Highly similar to HYPOTHETICAL 6.3 KD PROTEIN ZK6

52.2 IN CHROMOSOME III [Caenorhabditis elegans] //3.9e-37:199:95//Hs.1123

18:AA186477

R-NT2RP2000943//Homo sapiens mRNA for KIAA0755 protein, complete cds//9.

8e-98:494:96//Hs.19822:AB018298

R-NT2RP2000965//EST//0.22:223:60//Hs.105703:AA487021

R-NT2RP2000970//EST//8.7e-06:255:62//Hs.149202:AI246481

R-NT2RP2000985//ESTs, Weakly similar to HYPOTHETICAL 96.8 KD PROTEIN IN

SIS2-MTD1 INTERGENIC REGION [S.cerevisiae] //7.8e-92:468:95//Hs.12124:AA5

22537

R-NT2RP2000987//ESTs//4.5e-78:419:93//Hs.21968:H97521

R-NT2RP2001036//EST//2.0e-33:148:82//Hs.163196:AA767643

R-NT2RP2001044//ESTs//5.6e-95:493:95//Hs.21958:AA453660

R-NT2RP2001065//ESTs//3.6e-28:153:96//Hs.119314:AA432108

R-NT2RP2001070//EST//0.30:94:67//Hs.94289:N73665

R-NT2RP2001094//EST//0.75:101:69//Hs.161040:H82068

R-NT2RP2001119

R-NT2RP2001127//Homa sapiens mRNA for HRIHFB2060, partial cds//1.5e-56:3

04:94//Hs.146282:AB015348

R-NT2RP2001137

R-NT2RP2001149//ESTs//5.1e-66:324:97//Hs.27475:AA704512

R-NT2RP2001168//ESTs//2.0e-98:539:92//Hs.77870:AI188145

R-NT2RP2001173//Homo sapiens mRNA for KIAA0480 protein, complete cds//1.

5e-96:490:96//Hs.26247:AB007949

R-NT2RP2001174//ESTs//2.2e-63:354:93//Hs.24266:R28287

R-NT2RP2001196//ESTs//1.4e-83:463:93//Hs.124304:AA825510

R-NT2RP2001218//ESTs//1.4e-100:506:96//Hs.93391:AI188402

R-NT2RP2001226//EST//0.0074:154:63//Hs.128612:AA909358

R-NT2RP2001233//ESTs, Highly similar to ZINC FINGER PROTEIN ZFP-36 [Hom

o sapiens]//3.7e-65:538:80//Hs.44014:AA632298

R-NT2RP2001245//ESTs//5.2e-90:447:97//Hs.14559:H92996

R-NT2RP2001268//Homo sapiens mRNA for KIAA0810 protein, partial cds//1.5

e-112:544:97//Hs.7531:AB018353

R-NT2RP2001277//ESTs//2.0e-81:387:99//Hs.13751:AA908229

R-NT2RP2001290//ESTs//2.4e-91:501:92//Hs.12600:AA044775

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R-NT2RP2001295//ESTs//1.4e-70:337:99//Hs.123854:AA412665
R-NT2RP2001312//ESTs//4.6e-53:276:95//Hs.7961:AA401205
R-NT2RP2001327//ESTs, Moderately similar to tumor necrosis factor-alpha-
induced protein B12 [H.sapiens] //2.3e-43:238:93//Hs.106632:N25679
R-NT2RP2001328//ESTs//5.1e-99:499:96//Hs.34868:AI341138
R-NT2RP2001347//ESTs//6.7e-05:100:77//Hs.9536:AA114178
R-NT2RP2001378//ESTs//4.2e-83:456:93//Hs.10554:N50028
R-NT2RP2001381//ESTs//1.1e-26:148:96//Hs.161859:AA444038
R-NT2RP2001392//ESTs, Weakly similar to MITOCHONDRIAL LON PROTEASE HOMOL
OG PRECURSOR [H.sapiens] //3.9e-74:411:93//Hs.47305:AA195153
R-NT2RP2001394//ESTs//9.5e-54:305:93//Hs.70256:R07875
R-NT2RP2001397//ESTs, Highly similar to G2/MITOTIC-SPECIFIC CYCLIN B2 [
Mesocricetus auratus] //5.2e-97:469:97//Hs.20483:AA522505
R-NT2RP2001420//ESTs//1.6e-49:228:88//Hs.163602:N32030
R-NT2RP2001423//ESTs//2.0e-37:190:99//Hs.101565:R35431
R-NT2RP2001427//EST//1.7e-11:107:84//Hs.148584:AI201728
R-NT2RP2001436//ESTs, Weakly similar to F02D8.3 [C.elegans] //2.9e-114:55
8:97//Hs.7627:AI341556
R-NT2RP2001440//EST//0.17:192:58//Hs.133442:AI061394
R-NT2RP2001445//ESTs//1.1e-43:215:100//Hs.145497:AA501453
R-NT2RP2001449//ESTs//4.1e-08:234:61//Hs.134067:AI076765
R-NT2RP2001450//ESTs//9.5e-65:356:94//Hs.61829:AI079539
R-NT2RP2001467//Small inducible cytokine A5 (RANTES)//1.2e-34:255:83//Hs
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.155464:AF088219

R-NT2RP2001506//ESTs//2.9e-23:170:88//Hs.7147:T23513

R-NT2RP2001511//ESTs//2.0e-08:59:100//Hs.57660:AA251146

 $R-NT2RP2001520//Homo\ sapiens\ mRNA\ for\ mitochondrial\ carrier\ protein\ ARAL$ 

AR1//6.7e-106:545:95//Hs.4277:Y14494

R-NT2RP2001526//ESTs//3.7e-23:295:72//Hs.8514:AF039240

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R-NT2RP2001536//Homo sapiens X-ray repair cross-complementing protein 3
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(XRCC3) mRNA, complete cds//1.9e-15:99:95//Hs.99742:AF035586

R-NT2RP2001560//ESTs//2.2e-58:310:94//Hs.87454:AA732816

R-NT2RP2001569//Homo sapiens mRNA, chromosome 1 specific transcript KIAA

0488//2.0e-76:387:96//Hs.67619:AB007957

R-NT2RP2001576//Human mRNA for KIAA0105 gene, complete cds//0.17:193:60/

/Hs.119:D14661

R-NT2RP2001581//ESTs//5.1e-08:107:78//Hs.157114:T58884

R-NT2RP2001597//EST//5.2e-22:151:88//Hs.158613:AI369995

R-NT2RP2001601//ESTs//1.5e-78:373:99//Hs.137558:AI393767

R-NT2RP2001613

R-NT2RP2001628//EST//0.99:195:60//Hs.144238:W52294

R-NT2RP2001663//ESTs//4.0e-37:282:84//Hs.12319:W56090

R-NT2RP2001677//ESTs//1.4e-44:232:96//Hs.159387:AI370845

R-NT2RP2001678//ESTs//0.91:124:60//Hs.10593:AI201336

R-NT2RP2001699//EST//0.0033:230:61//Hs.146544:AI125323

R-NT2RP2001720//ESTs//1.8e-52:255:99//Hs.101064:AA290579

R-NT2RP2001721//ESTs//7.0e-101:479:99//Hs.129750:AA987538

R-NT2RP2001740//ESTs//3.3e-76:379:96//Hs.144704:AI147100

R-NT2RP2001748//ESTs//1.4e-44:352:81//Hs.142259:AA828840

R-NT2RP2001762//Homo sapiens exonuclease 1a (EXO1a) mRNA, complete cds//

2.1e-105:519:96//Hs.47504:AF091754

R-NT2RP2001813//ESTs//6.3e-78:406:95//Hs.21902:R44037

R-NT2RP2001861

R-NT2RP2001869//EST//2.8e-21:173:82//Hs.130321:AI002941

R-NT2RP2001876//ESTs//6.1e-102:526:95//Hs.4944:AA533088

R-NT2RP2001883//ESTs, Weakly similar to No definition line found [C.eleg

ans] //6.9e-110:556:95//Hs.23159:AA113849

R-NT2RP2001900//ESTs//6.9e-85:442:95//Hs.154220:AA171724

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R-NT2RP2001907//ESTs//2.1e-82:432:94//Hs.142257:AA188423
R-NT2RP2001926//EST//2.3e-24:299:71//Hs.135085:AI097268
R-NT2RP2001936//ESTs//1.1e-45:265:92//Hs.112482:T66087
R-NT2RP2001943//EST//1.4e-05:246:61//Hs.144096:AI032180
R-NT2RP2001946//ESTs//3.6e-87:410:99//Hs.20242:W72594
R-NT2RP2001947//ESTs//1.9e-55:338:88//Hs.58582:T72588
R-NT2RP2001969
R-NT2RP2001976//ESTs//1.2e-98:499:95//Hs.121028:AA902745
R-NT2RP2001985//ESTs, Weakly similar to GTPASE-ACTIVATING PROTEIN SPA-1
[M.musculus] //8.3e-15:118:89//Hs.18760:AA166678
R-NT2RP2002025//ESTs//2.1e-82:393:98//Hs.159488:AI378233
R-NT2RP2002032//ESTs//4.4e-98:531:91//Hs.93836:AA813332
R-NT2RP2002033//ESTs//3.5e-43:229:96//Hs.30563:AA102627
R-NT2RP2002041
R-NT2RP2002046//ESTs//1.6e-101:476:99//Hs.101107:AA825938
R-NT2RP2002047//ESTs//9.1e-85:431:95//Hs.116750:AA629895
R-NT2RP2002058//ESTs//1.3e-31:163:99//Hs.33085:AA258068
R-NT2RP2002066//ESTs//1.9e-87:459:93//Hs.118871:AA846091
R-NT2RP2002070//ESTs//4.1e-63:332:96//Hs.156446:T92265
R-NT2RP2002076//Homo sapiens clone 24804 mRNA sequence//1.7e-26:178:87//
Hs.11039:AF052183
R-NT2RP2002079//ESTs//1.2e-79:389:97//Hs.135214:AI350524
R-NT2RP2002099//Homo sapiens mRNA for E1B-55kDa-associated protein//1.5e
-60:376:89//Hs.155218:AJ007509
R-NT2RP2002105//ESTs//8.4e-54:313:90//Hs.98702:AI123000
R-NT2RP2002124//ESTs//6.6e-81:431:93//Hs.127326:AA525134
R-NT2RP2002137//Deoxycytidine kinase//0.29:183:62//Hs.709:M60527
R-NT2RP2002154//ESTs//9.6e-97:539:91//Hs.18624:AA523268
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R-NT2RP2002172//EST//0.69:53:75//Hs.156238:AI334495

R-NT2RP2002185//ESTs, Weakly similar to F15C11.2 [C.elegans] //1.4e-54:26 9:98//Hs.107201:W52859

R-NT2RP2002192//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING ENTRY !!!! [H.sapiens] //3.9e-15:245:71//Hs.87578:AI125363

R-NT2RP2002193//ESTs//3.5e-79:453:90//Hs.76578:AI290672

R-NT2RP2002208//ESTs//2.0e-72:347:99//Hs.164028:AI003946

R-NT2RP2002219//EST//0.039:229:63//Hs.149830:AI287499

R-NT2RP2002231//ESTs//3.3e-64:337:94//Hs.79828:AA642341

R-NT2RP2002252//ESTs, Highly similar to co-repressor protein [M.musculus]//5.4e-48:238:99//Hs.22583:AA188168

R-NT2RP2002256//Homo sapiens retinoic acid hydroxylase mRNA, complete cd s/1.6e-15:131:83//Hs.150595:AF005418

R-NT2RP2002259//Human L-myc protein gene, complete cds//5.3e-99:548:91// Hs.92137:M19720

R-NT2RP2002270//ESTs, Weakly similar to AF-9 PROTEIN [H.sapiens] //4.8e-1 00:550:91//Hs.4029:Z78373

R-NT2RP2002292//ESTs, Weakly similar to F13B12.1 [C.elegans] //3.2e-92:48 2:93//Hs.5570:A1377863

R-NT2RP2002312//Homo sapiens CDP-diacylglycerol synthase 2 (CDS2) mRNA, partial cds//4.1e-103:527:94//Hs.24812:AF069532

R-NT2RP2002316//ESTs//4.2e-91:425:100//Hs.3350:AI368015

R-NT2RP2002325//Homo sapiens peroxisomal biogenesis factor (PEX11a) mRNA, complete cds//1.2e-112:567:95//Hs.31034:AB015594

R-NT2RP2002333//ESTs//1.9e-86:483:91//Hs.155198:AA767372

 $R-NT2RP2002385//Homo\ sapiens\ synaptic\ glycoprotein\ SC2\ spliced\ variant\ m$ 

RNA, complete cds//1.2e-103:600:89//Hs.109051:AF038958

R-NT2RP2002394//ESTs//0.11:158:65//Hs.28792:AI343467

R-NT2RP2002408//ESTs//1.5e-51:278:93//Hs.6044:W22815

 $R-NT2RP2002426//Homo\ sapiens\ mRNA\ for\ KIAA0563\ protein,\ complete\ cds//1.$ 

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7e-33:285:80//Hs.15731:AB011135
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R-NT2RP2002439//ESTs//3.2e-12:134:76//Hs.32246:AA464020

R-NT2RP2002457//ESTs//4.7e-52:282:94//Hs.21968:H97521

R-NT2RP2002464//ESTs//5.3e-27:148:98//Hs.115660:AI362230

R-NT2RP2002475//ESTs//3.9e-85:439:94//Hs.9873:W27233

R-NT2RP2002479//Homo sapiens mRNA for ABC transporter 7 protein, complet

e cds//9.9e-115:605:92//Hs.125856:AB005289

R-NT2RP2002498//ESTs//6.3e-37:227:93//Hs.108779:N73180

R-NT2RP2002503//ESTs//1.9e-54:358:86//Hs.57800:W60838

R-NT2RP2002504//Homo sapiens mRNA for KIAA0791 protein, complete cds//8.

5e-107:583:91//Hs.23255:AB018334

R-NT2RP2002520//ESTs//4.2e-99:509:94//Hs.32368:AA205305

R-NT2RP2002537//ESTs//4.2e-105:552:93//Hs.154363:AA533090

R-NT2RP2002546//Homo sapiens clone TUA8 Cri-du-chat region mRNA//2.6e-10

9:570:93//Hs.49476:AF009314

R-NT2RP2002549//DNA polymerase gamma//1.1e-35:189:86//Hs.80961:U60325

R-NT2RP2002591//ESTs, Weakly similar to ZINC FINGER PROTEIN 84 [H.sapien

s]//7.5e-118:564:97//Hs.94549:AA149547

R-NT2RP2002595//EST//1.4e-15:101:95//Hs.129528:AA994783

R-NT2RP2002606//ESTs//4.5e-99:475:98//Hs.45046:N40170

R-NT2RP2002609//ESTs//1.9e-104:568:92//Hs.9175:AI184220

R-NT2RP2002618//ESTs//0.014:493:57//Hs.96322:AA541615

R-NT2RP2002621//EST//4.4e-36:252:84//Hs.149580:AI281881

R-NT2RP2002643//ESTs//6.9e-32:247:74//Hs.33354:AA179944

R-NT2RP2002672

R-NT2RP2002701//N-acetylglucosaminidase, alpha- (Sanfilippo disease IIIB

//0.99:184:63//Hs.50727:U43572

R-NT2RP2002706//EST//2.8e-41:148:86//Hs.161917:AA483223

R-NT2RP2002710//EST//0.34:105:71//Hs.136747:AA749210

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R-NT2RP2002727//ESTs//8.7e-68:368:94//Hs.14366:T78626
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R-NT2RP2002736//ESTs//9.7e-98:457:99//Hs.74899:AA993300

R-NT2RP2002740//Homo sapiens mRNA for KIAA0536 protein, partial cds//0.6

6:360:59//Hs.119139:AB011108

R-NT2RP2002741//ESTs//3.1e-102:489:98//Hs.112024:AI042352

R-NT2RP2002750//EST//3.6e-43:166:86//Hs.162404:AA573131

R-NT2RP2002752//ESTs//5.0e-56:355:89//Hs.95867:M62042

R-NT2RP2002753//ESTs//1.7e-49:262:96//Hs.49005:W89124

R-NT2RP2002769//ESTs//1.3e-59:376:88//Hs.4046:H03587

R-NT2RP2002778//Homo sapiens clone 24606 mRNA sequence//4.0e-65:341:94//

Hs.17481:AF070537

R-NT2RP2002800//ESTs//6.5e-08:79:84//Hs.153262:AA551124

R-NT2RP2002839//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING

ENTRY !!!! [H.sapiens] //1.6e-100:501:97//Hs.136202:AA206578

R-NT2RP2002857//ESTs//4.3e-94:463:97//Hs.134292:AA603031

R-NT2RP2002862//ESTs//2.3e-42:302:82//Hs.117969:H94870

R-NT2RP2002880

R-NT2RP2002891

R-NT2RP2002925//ESTs//1.3e-103:564:92//Hs.142079:AA182894

R-NT2RP2002928//ESTs//3.9e-108:502:99//Hs.29105:AA574143

R-NT2RP2002929//ESTs//4.1e-106:499:99//Hs.44743:AA837096

R-NT2RP2002954//ESTs//2.6e-88:417:99//Hs.100824:AI308771

R-NT2RP2002959//ESTs//7.5e-101:489:97//Hs.32690:N57480

R-NT2RP2002979//ESTs//5.4e-06:197:65//Hs.146726:AI147060

R-NT2RP2002980//ESTs//1.0e-110:562:96//Hs.28444:AA083213

R-NT2RP2002986//ESTs, Highly similar to RING CANAL PROTEIN [Drosophila

melanogaster]//3.1e-119:578:97//Hs.106290:AI125291

R-NT2RP2002987//Human mRNA for KIAA0331 gene, complete cds//1.0:78:74//H

s.146395:AB002329

R-NT2RP2002993//ESTs, Weakly similar to DNA-DIRECTED RNA POLYMERASE II 1

40 KD POLYPEPTIDE [H.sapiens] //2.4e-98:467:98//Hs.86337:AA149311

R-NT2RP2003000//ESTs//0.0070:400:61//Hs.138506:U85642

R-NT2RP2003034//ESTs//9.3e-87:408:96//Hs.164042:H12594

R-NT2RP2003073//Human transporter protein (g17) mRNA, complete cds//0.95

:259:61//Hs.76460:U49082

R-NT2RP2003099//Thromboxane A2 receptor//2.6e-42:328:81//Hs.89887:D38081

R-NT2RP2003108//ESTs//2.3e-82:398:98//Hs.5105:AA115512

R-NT2RP2003117//Human mRNA for KIAA0347 gene, complete cds//2.4e-49:336:

86//Hs.101996:AB002345

R-NT2RP2003121//ESTs//2.0e-75:380:96//Hs.133127:AA133355

R-NT2RP2003125

R-NT2RP2003129//EST//0.68:115:69//Hs.122196:AA780986

R-NT2RP2003137//ESTs//2.1e-37:259:85//Hs.63169:N78506

R-NT2RP2003161//ESTs//2.5e-88:451:96//Hs.29041:W37379

R-NT2RP2003164//ESTs//4.3e-113:543:97//Hs.8980:AA629067

R-NT2RP2003165//ESTs//6.9e-83:486:89//Hs.138632:H97952

R-NT2RP2003177//ESTs//0.47:38:100//Hs.61790:AA421156

R-NT2RP2003194//ESTs//4.7e-118:582:96//Hs.27266:AA053816

R-NT2RP2003206//ESTs//0.032:388:58//Hs.122148:AA442074

R-NT2RP2003230//ESTs//8.8e-103:478:99//Hs.40140:AI079253

R-NT2RP2003237//ESTs//2.7e-76:392:96//Hs.106278:R37661

R-NT2RP2003243//ESTs//3.6e-53:300:92//Hs.118793:AA192438

R-NT2RP2003265//ESTs, Highly similar to protein NGD5 [M.musculus]//3.3e-

110:557:96//Hs.24994:AA236937

R-NT2RP2003272//ESTs, Weakly similar to F15C11.2 [C.elegans] //1.2e-34:22

8:89//Hs.107201:W52859

R-NT2RP2003277//Homo sapiens mRNA for KIAA0625 protein, partial cds//1.4

e-111:565:95//Hs.154919:AB014525

R-NT2RP2003280//ESTs//2.6e-101:541:94//Hs.6982:AA622427

R-NT2RP2003286//ESTs//1.2e-104:497:98//Hs.113052:AI222106

R-NT2RP2003293//Human mRNA for KIAA0118 gene, partial cds//9.1e-44:458:7

4//Hs.154326:D42087

R-NT2RP2003295//Protein serine/threonine kinase stk2//0.31:321:57//Hs.10

87:L20321

R-NT2RP2003297//ESTs//3.0e-15:118:87//Hs.16621:AA098874

R-NT2RP2003308//ESTs, Moderately similar to CROOKED NECK PROTEIN [Droso

phila melanogaster]//4.8e-109:553:96//Hs.26089:AA195126

R-NT2RP2003329//ESTs//0.99:208:62//Hs.143607:AI424948

R-NT2RP2003339//ESTs//1.3e-85:441:96//Hs.24115:N32618

R-NT2RP2003347//ESTs//1.5e-70:365:96//Hs.155773:AI312825

R-NT2RP2003367//EST//5.8e-80:376:100//Hs.112500:AA599014

R-NT2RP2003391//ESTs//2.8e-98:484:97//Hs.5842:AA534476

R-NT2RP2003393//ESTs//2.0e-96:510:93//Hs.75844:AA115502

R-NT2RP2003394//EST//5.2e-06:264:63//Hs.144234:W52249

R-NT2RP2003401//ESTs//6.1e-25:161:90//Hs.155360:AA984683

R-NT2RP2003433//ESTs, Highly similar to PROTEIN TRANSPORT PROTEIN SEC61

ALPHA SUBUNIT [Canis familiaris] //1.2e-106:508:98//Hs.131840:AI016073

R-NT2RP2003445//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING

ENTRY !!!! [H.sapiens] //5.6e-21:161:70//Hs.43153:N22360

R-NT2RP2003446//ESTs, Weakly similar to C27H6.4 [C.elegans]//6.0e-105:52

9:96//Hs.8055:W60903

R-NT2RP2003456//ESTs//7.5e-96:449:99//Hs.25362:AI277332

R-NT2RP2003480//ESTs//1.6e-116:583:96//Hs.59757:AA176121

R-NT2RP2003499//ESTs, Weakly similar to elastin like protein [D.melanoga

ster]//7.0e-71:365:95//Hs.101056:R52777

R-NT2RP2003506//ESTs, Weakly similar to ORF YPL207w [S.cerevisiae] //2.3e

-115:577:96//Hs.16277:N36831

R-NT2RP2003511//ESTs//1.6e-22:182:85//Hs.28249:AA203733

R-NT2RP2003513//Human mRNA for KIAA0270 gene, partial cds//1.3e-108:566: 94//Hs.78482:Y16270

R-NT2RP2003517//Platelet-derived growth factor beta polypeptide (simian sarcoma viral (v-sis) oncogene homolog)//4.9e-62:518:79//Hs.1976:M12783
R-NT2RP2003522//ESTs//2.0e-97:462:99//Hs.24512:D60170

R-NT2RP2003533//ESTs//4.4e-45:273:78//Hs.140225:AA704101

R-NT2RP2003543//EST//1.0:80:68//Hs.65646:F13684

R-NT2RP2003559//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING

ENTRY !!!! [H.sapiens] //1.8e-58:316:94//Hs.28891:W72439

R-NT2RP2003564//ESTs//3.2e-112:528:99//Hs.53940:N46696

R-NT2RP2003581//ESTs//1.3e-88:506:93//Hs.16157:AA203719

R-NT2RP2003596//ESTs, Weakly similar to No definition line found [C.eleg ans] //4.7e-101:495:98//Hs.34627:AA126463

R-NT2RP2003604//Homo sapiens alpha-catenin related protein (ACRP) mRNA, complete cds//1.7e-103:501:97//Hs.58488:U97067

R-NT2RP2003629//EST//0.032:440:59//Hs.135297:AI038981

R-NT2RP2003643//ESTs, Weakly similar to HYPOTHETICAL 14.1 KD PROTEIN IN

MURZ-RPON INTERGENIC REGION [E.coli] //9.1e-62:359:92//Hs.12492:AA203188

R-NT2RP2003668//EST//9.4e-110:535:97//Hs.116279:AA628951

R-NT2RP2003687//EST//5.9e-05:196:65//Hs.139064:AA135523

R-NT2RP2003691//ESTs, Weakly similar to F59C6.9 [C.elegans] //1.0:202:62/ /Hs.65539:AI148540

R-NT2RP2003702//ESTs, Moderately similar to ovarian-specific protein [R. norvegicus] //4.3e-99:492:96//Hs.93332:AA811920

R-NT2RP2003704//ESTs//1.0:155:63//Hs.104166:AA740246

R-NT2RP2003706//Homo sapiens mRNA for KIAA0525 protein, partial cds//8.4 e-47:265:93//Hs.78494:AB011097

R-NT2RP2003713//EST//0.81:210:59//Hs.14551:T79401

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R-NT2RP2003714//ESTs//1.7e-99:495:96//Hs.158101:AI365003
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R-NT2RP2003727//Human 19.8 kDa protein mRNA, complete cds//0.84:221:60//

Hs.2384:U18914

R-NT2RP2003737//ESTs, Highly similar to UBIQUITIN-CONJUGATING ENZYME E2

-17 KD [Caenorhabditis elegans] //2.4e-50:302:90//Hs.19196:W74577

R-NT2RP2003751

R-NT2RP2003760//ESTs//2.6e-101:548:93//Hs.115987:AA483808

R-NT2RP2003764//ESTs//8.2e-25:134:98//Hs.64036:AA127709

R-NT2RP2003769//ESTs//1.7e-108:545:95//Hs.56847:AA541606

R-NT2RP2003770//Homo sapiens sperm acrosomal protein mRNA, complete cds/

/6.0e-106:531:96//Hs.90436:AF047437

R-NT2RP2003777//ESTs//2.6e-59:323:94//Hs.10101:AI381811

R-NT2RP2003781//ESTs//2.0e-25:269:75//Hs.144951:N34836

R-NT2RP2003793//ESTs//8.7e-94:466:97//Hs.93949:AA782955

R-NT2RP2003840//ESTs//3.4e-97:533:93//Hs.16130:AA195077

R-NT2RP2003857//H.sapiens mRNA for G9a//2.8e-23:351:65//Hs.75196:X69838

R-NT2RP2003859//ESTs//3.0e-07:96:81//Hs.153262:AA551124

R-NT2RP2003871//ESTs//1.9e-102:509:97//Hs.25726:AA430167

R-NT2RP2003885//ESTs//1.0e-102:502:97//Hs.36353:AA702341

R-NT2RP2003912//EST//1.2e-38:336:76//Hs.134975:AI094611

R-NT2RP2003952//Homo sapiens DNA-binding protein (CROC-1B) mRNA, complet

e cds//0.90:190:60//Hs.75875:U49278

R-NT2RP2003968//Homo sapiens hUBP mRNA for ubiquitin specific protease,

complete cds//7.6e-116:568:97//Hs.35086:AB014458

R-NT2RP2003976//Homo sapiens mRNA for KIAA0447 protein, complete cds//3.

6e-109:540:97//Hs.7302:AB007916

R-NT2RP2003981//Homo sapiens mRNA for KIAA0804 protein, partial cds//2.5

e-115:568:96//Hs.7316:AB018347

R-NT2RP2003984

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R-NT2RP2003986//ESTs//4.9e-36:272:82//Hs.158268:AA738087
R-NT2RP2003988//ESTs, Weakly similar to reverse transcriptase [H.sapiens
]//3.2e-110:519:99//Hs.36093:AI149968
R-NT2RP2004014//ESTs//8.4e-102:483:99//Hs.22867:AI417478
R-NT2RP2004041
R-NT2RP2004042//ESTs//1.5e-105:466:97//Hs.7296:N29706
R-NT2RP2004066//ESTs//1.4e-110:559:96//Hs.71916:AA219699
R-NT2RP2004081//ESTs//3.7e-105:503:98//Hs.27542:AA977204
R-NT2RP2004098//EST//7.3e-26:203:87//Hs.21897:R41461
R-NT2RP2004124//ESTs//1.1e-83:435:95//Hs.43299:N23036
R-NT2RP2004142//EST//1.3e-06:165:65//Hs.146742:AI147500
R-NT2RP2004152//ESTs//7.0e-98:455:100//Hs.17731:AI342241
R-NT2RP2004165//ESTs, Highly similar to DYNEIN BETA CHAIN, CILIARY [Ant
hocidaris crassispina]//1.0e-118:583:97//Hs.16520:AI224533
R-NT2RP2004170//ESTs//6.7e-66:407:88//Hs.157138:AI348544
R-NT2RP2004172//ESTs//1.5e-109:567:95//Hs.159091:AA033974
R-NT2RP2004187//ESTs//3.6e-92:488:93//Hs.22954:W26589
R-NT2RP2004194//ESTs//6.2e-114:585:95//Hs.18778:AA203167
R-NT2RP2004196
R-NT2RP2004207//ESTs//6.3e-102:488:98//Hs.22678:AA604756
R-NT2RP2004226//ESTs//8.8e-18:252:71//Hs.11924:W26972
R-NT2RP2004232//ESTs, Highly similar to protein kinase C mu [H.sapiens]/
/5.2e-105:499:98//Hs.143460:AA483305
R-NT2RP2004239//ESTs//1.2e-16:171:80//Hs.16134:AA203116
R-NT2RP2004240//Homo sapiens antigen NY-CO-1 (NY-CO-1) mRNA, complete cd
s//3.4e-103:530:93//Hs.54900:AF039687
R-NT2RP2004242//ESTs//1.3e-85:460:93//Hs.104535:AA211483
R-NT2RP2004245//ESTs//6.4e-117:575:97//Hs.23744:AA035744
```

R-NT2RP2004270//ESTs//1.0:95:69//Hs.141371:H92187

R-NT2RP2004300//ESTs//4.4e-80:379:99//Hs.130874:AA905056

R-NT2RP2004316//Homo sapiens EXT-like protein 2 (EXTL2) mRNA, complete c

ds//4.7e-110:544:96//Hs.61152:AF000416

R-NT2RP2004321//ESTs//2.1e-18:104:99//Ĥs.107207:AA044788

R-NT2RP2004339//EST//1.4e-47:309:86//Hs.161917:AA483223

R-NT2RP2004347

R-NT2RP2004364//ESTs//1.1e-113:566:96//Hs.25880:AI268173

R-NT2RP2004365//ESTs//0.022:271:62//Hs.38897:AI129310

R-NT2RP2004366//ESTs//9.5e-71:335:100//Hs.91867:AI218624

R-NT2RP2004373//ESTs//4.2e-25:172:87//Hs.83243:N32192

R-NT2RP2004389//ESTs, Highly similar to HYPOTHETICAL 70.7 KD PROTEIN FO

9G8.3 IN CHROMOSOME III [Caenorhabditis elegans] //1.4e-11:108:82//Hs.304

90:AA146916

R-NT2RP2004392//ESTs//3.4e-81:427:94//Hs.5827:AA581646

R-NT2RP2004396//EST//5.6e-06:100:77//Hs.138623:H92473

R-NT2RP2004399//EST//0.98:337:59//Hs.118446:N67900

R-NT2RP2004400//ESTs//2.1e-90:422:100//Hs.152460:AA602921

R-NT2RP2004412//ESTs//1.4e-105:503:98//Hs.15929:AA403121

R-NT2RP2004425//EST//0.00017:225:60//Hs.146935:AI168124

R-NT2RP2004476//ESTs//1.4e-88:477:94//Hs.4859:N29695

R-NT2RP2004490//Homo sapiens 3-phosphoinositide dependent protein kinase

-1 (PDK1) mRNA, complete cds//8.6e-34:143:98//Hs.154729:AF017995

R-NT2RP2004512//ESTs//2.6e-91:426:100//Hs.94133:AI270700

R-NT2RP2004523//ESTs//1.6e-74:377:97//Hs.14217:R61320

R-NT2RP2004538//Thromboxane A2 receptor//1.4e-45:279:89//Hs.89887:D38081

R-NT2RP2004551//ESTs//0.47:147:66//Hs.131519:AI024347

R-NT2RP2004568//ESTs//1.3e-107:567:94//Hs.65234:AA195470

R-NT2RP2004580//ESTs//5.9e-29:156:98//Hs.147801:AI221661

R-NT2RP2004587//ESTs//1.0e-102:495:97//Hs.91662:AA781126

R-NT2RP2004594//ESTs//4.1e-56:298:95//Hs.24641:AA954666

R-NT2RP2004600//ESTs//4.8e-67:374:93//Hs.49762:N69862

R-NT2RP2004602//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT

RY !!!! [H.sapiens] //4.5e-07:149:76//Hs.12845:N28835

R-NT2RP2004614//ESTs//1.0e-111:557:96//Hs.37892:N53497

R-NT2RP2004655//Homo sapiens mRNA for leucine rich protein//2.4e-118:587

:96//Hs.5198:AJ006291

R-NT2RP2004664//Homo sapiens mRNA for KIAA0460 protein, partial cds//5.9

e-107:520:96//Hs.29956:AB007929

R-NT2RP2004675//ESTs//2.7e-82:407:97//Hs.116113:F18930

R-NT2RP2004681//NUCLEOLIN//0.34:387:58//Hs.79110:M60858

R-NT2RP2004689//Homo sapiens mRNA for KIAA0625 protein, partial cds//5.0

e-120:600:96//Hs.154919:AB014525

R-NT2RP2004709//ESTs//1.1e-106:511:98//Hs.38034:AI149793

R-NT2RP2004710//ESTs//9.9e-87:477:93//Hs.6834:AA203433

R-NT2RP2004736//Homo sapiens mRNA for KIAA0478 protein, complete cds//1.

3e-118:594:96//Hs.4236:AB007947

R-NT2RP2004743//ESTs//2.1e-48:327:88//Hs.43635:AA447015

R-NT2RP2004767//EST//4.0e-57:328:81//Hs.142796:N51423

R-NT2RP2004775//ESTs//9.4e-60:326:94//Hs.115339:AA136774

R-NT2RP2004791//ESTs//3.2e-82:367:96//Hs.141911:N64013

R-NT2RP2004799//Homo sapiens ATP-specific succinyl-CoA synthetase beta s

ubunit (SCS) mRNA, partial cds//8.0e-116:564:96//Hs.40820:AF058953

R-NT2RP2004802//ESTs//6.5e-111:586:94//Hs.90375:W74579

R-NT2RP2004816//Homo sapiens H beta 58 homolog mRNA, complete cds//8.7e-

120:584:97//Hs.67052:AF054179

R-NT2RP2004841//EST//3.8e-31:323:74//Hs.147714:AI219906

R-NT2RP2004861//EST//0.92:147:63//Hs.23064:R20803

R-NT2RP2004897//ESTs//1.7e-46:390:80//Hs.139225:H96567

R-NT2RP2004936//EST//0.97:176:63//Hs.137436:AA280529

R-NT2RP2004959//ESTs//0.059:137:64//Hs.144109:AI345543

R-NT2RP2004961//ESTs//1.8e-87:409:100//Hs.138297:AA781941

R-NT2RP2004962//ESTs//0.0021:292:59//Hs.145917:AI275458

R-NT2RP2004967//Human mRNA for KIAA0118 gene, partial cds//7.4e-51:506:7

5//Hs.154326:D42087

R-NT2RP2004978//ESTs//0.95:138:63//Hs.13619:W93496

R-NT2RP2004982//ESTs//7.8e-95:468:97//Hs.22545:R43910

R-NT2RP2004985

R-NT2RP2004999//ESTs//2.9e-94:450:98//Hs.128766:AI419902

R-NT2RP2005000

R-NT2RP2005001//Homo sapiens mRNA for KIAA0615 protein, complete cds//9.

6e-113:577:95//Hs.155972:AB014515

R-NT2RP2005003//EST//1.3e-75:387:96//Hs.140843:R42235

R-NT2RP2005012//Homo sapiens SEC63 (SEC63) mRNA, complete cds//3.1e-116:

568:97//Hs.31575:AF100141

R-NT2RP2005018//ESTs//7.5e-46:280:90//Hs.126857:AA932161

R-NT2RP2005020//ESTs//1.6e-105:554:94//Hs.14846:AA148507

R-NT2RP2005031//EST//3.1e-79:379:99//Hs.139709:AA227887

R-NT2RP2005037//ESTs//5.3e-102:551:93//Hs.26516:AA195220

R-NT2RP2005038//ESTs//5.8e-101:566:92//Hs.46964:N49757

R-NT2RP2005108

R-NT2RP2005116//Homo sapiens mRNA for KIAA0664 protein, partial cds//2.7

e-105:518:97//Hs.22616:AB014564

R-NT2RP2005126//H.sapiens mRNA for RNA helicase (Myc-regulated dead box

protein)//4.6e-69:464:85//Hs.100555:X98743

R-NT2RP2005139//ESTs//1.0e-108:545:95//Hs.21006:AA523383

R-NT2RP2005140//ESTs//4.3e-90:422:99//Hs.62180:AI341261

R-NT2RP2005144//ESTs//0.91:162:62//Hs.52399:AI075744

R-NT2RP2005147//ESTs//4.6e-100:502:96//Hs.27931:AA633438

R-NT2RP2005159//ESTs//7.5e-105:533:95//Hs.109819:AI357582

R-NT2RP2005162//ESTs//6.6e-83:419:96//Hs.113998:H50648

 $R-NT2RP2005168//Homo\ sapiens\ mRNA\ for\ E1B-55kDa-associated\ protein//2.4e$ 

-101:513:95//Hs.155218:AJ007509

R-NT2RP2005204//ESTs, Weakly similar to UBIQUITIN-ACTIVATING ENZYME E1: H

OMOLOG [H.sapiens] //1.9e-115:577:96//Hs.7600:H98166

R-NT2RP2005227//Homo sapiens LIM protein mRNA, complete cds//1.0e-45:359:82//Hs.154103:AF061258

R-NT2RP2005239//ESTs, Highly similar to NIFS-LIKE 54.5 KD PROTEIN [Sacc haromyces cerevisiae] //1.0e-47:245:97//Hs.21090:AA418587

R-NT2RP2005254//ESTs//3.3e-111:581:94//Hs.22549:AA524503

R-NT2RP2005270//ESTs, Highly similar to HYPOTHETICAL 67.6 KD PROTEIN ZK 637.3 IN CHROMOSOME III [Caenorhabditis elegans] //1.1e-79:412:95//Hs.230 47:N66596

R-NT2RP2005276//ESTs//4.6e-85:426:96//Hs.24550:AA316272

R-NT2RP2005287//ESTs//1.7e-109:565:94//Hs.61976:AI279001

R-NT2RP2005288//Homo sapiens RCC1-like G exchanging factor RLG mRNA, complete cds//2.4e-125:594:98//Hs.27007:AF060219

R-NT2RP2005289//Homo sapiens mRNA for XPR2 protein//4.9e-112:545:96//Hs.

44766: AJ007590

R-NT2RP2005293//ESTs//5.1e-116:538:99//Hs.62180:AI341261

R-NT2RP2005315//ESTs//1.4e-82:415:97//Hs.155829:AA018338

R-NT2RP2005325//Human LIM-homeobox domain protein (hLH-2) mRNA, complete cds//2.5e-45:272:91//Hs.1569:U11701

R-NT2RP2005336//ESTs//1.9e-93:444:99//Hs.110966:AA151699

R-NT2RP2005344//Homo sapiens GDP-L-fucose pyrophosphorylase (GFPP) mRNA, complete cds//0.011:463:58//Hs.150926:AF017445

R-NT2RP2005354//ESTs//7.2e-22:148:91//Hs.153783:H14544

R-NT2RP2005360//ESTs//0.048:225:60//Hs.7602:AA099247

R-NT2RP2005393//Homo sapiens mRNA for KIAA0761 protein, partial cds//2.9 e-41:248:82//Hs.93121:AB018304

R-NT2RP2005407//ESTs, Weakly similar to OSH1 PROTEIN [Saccharomyces cere visiae] //2.5e-75:461:88//Hs.70849:AA121697

R-NT2RP2005436//ESTs, Weakly similar to HYPOTHETICAL 37.0 KD PROTEIN B04 95.8 IN CHROMOSOME II [C.elegans] //8.1e-96:491:95//Hs.7194:AI185631

R-NT2RP2005441//ESTs//1.1e-110:548:96//Hs.5209:AA780068

R-NT2RP2005453//ESTs//0.94:352:58//Hs.25870:H14423

R-NT2RP2005457//ESTs//2.1e-46:236:97//Hs.19522:AA975096

R-NT2RP2005464//ESTs//1.8e-72:349:99//Hs.44045:N51307

R-NT2RP2005465//ESTs//0.0058:322:58//Hs.127009:AI378936

R-NT2RP2005472//ESTs//0.47:309:60//Hs.144838:AI222019

R-NT2RP2005476//ESTs//5.1e-40:205:98//Hs.101577:AI168526

R-NT2RP2005490//ESTs//1.3e-70:364:96//Hs.134382:AA083573

R-NT2RP2005491//EST//0.012:220:60//Hs.144448:AA812455

R-NT2RP2005495//ESTs//1.2e-86:501:91//Hs.99445:R93540

R-NT2RP2005496//ESTs//3.2e-34:263:81//Hs.70279:AA757426

R-NT2RP2005498//ESTs, Highly similar to PROTEIN PHOSPHATASE PP2A, 55 KD REGULATORY SUBUNIT, NEURONAL ISOFORM [Oryctolagus cuniculus] //2.3e-45:2 84:88//Hs.85752:AI138993

R-NT2RP2005501//ESTs//2.5e-84:404:98//Hs.143812:AI141755

R-NT2RP2005509//ESTs, Highly similar to HYPOTHETICAL 37.2 KD PROTEIN C1 2C2.09C IN CHROMOSOME I [Schizosaccharomyces pombe]//8.2e-36:215:92//Hs. 5298:AA725071

R-NT2RP2005520//Homo sapiens chromosome-associated protein-E (hCAP-E) mR NA, complete cds//3.2e-110:570:94//Hs.119023:AF092563

R-NT2RP2005525//ESTs, Weakly similar to !!!! ALU SUBFAMILY SQ WARNING EN TRY !!!! [H.sapiens] //1.3e-84:433:95//Hs.36942:AA524535

R-NT2RP2005531//EST//0.98:64:70//Hs.146573:AI139856

R-NT2RP2005539//Homo sapiens mRNA for NS1-binding protein (NS1-BP)//8.8e

-108:560:94//Hs.159597:AJ012449

R-NT2RP2005540//Homo sapiens mRNA for KIAA0494 protein, complete cds//1.

7e-115:583:96//Hs.62515:AB007963

R-NT2RP2005549//EST//0.61:111:62//Hs.147482:AI215572

R-NT2RP2005555//ESTs//6.6e-108:507:99//Hs.68613:AI357567

R-NT2RP2005557//ESTs//3.1e-105:495:99//Hs.105985:AA885169

R-NT2RP2005581//ESTs//1.7e-79:445:92//Hs.138152:H03240

R-NT2RP2005600//ESTs//1.3e-38:192:100//Hs.48329:W92733

R-NT2RP2005605//ESTs//7.6e-87:409:99//Hs.45005:AA975060

R-NT2RP2005620//ESTs//2.9e-96:463:97//Hs.7407:AI376788

R-NT2RP2005622//ESTs//1.8e-104:497:98//Hs.22595:AA394229

R-NT2RP2005637//EST//2.5e-20:163:71//Hs.161164:AI418211

R-NT2RP2005640//ESTs//5.0e-99:473:98//Hs.23467:AA708740

R-NT2RP2005645//ESTs//9.5e-23:231:77//Hs.5534:AA195173

R-NT2RP2005651//ESTs, Highly similar to XFIN PROTEIN [Xenopus laevis] //

2.9e-103:525:96//Hs.70589:AA868470

 $R-NT2RP2005654//Insulin-like\ growth\ factor\ binding\ protein\ 2//0.94:223:6$ 

0//Hs.162:X16302

R-NT2RP2005669//Homo sapiens nitrilase 1 (NIT1) mRNA, complete cds//2.7e

-14:87:100//Hs.146406:AF069987

R-NT2RP2005675//Homo sapiens growth suppressor related (DOC-1R) mRNA, co

mplete cds//5.8e-91:434:98//Hs.25664:AF089814

R-NT2RP2005683//ESTs//1.5e-98:494:96//Hs.22595:AA394229

R-NT2RP2005690//ESTs//4.8e-43:286:86//Hs.150727:AI292236

R-NT2RP2005694//EST//3.1e-82:386:100//Hs.149391:AI273643

R-NT2RP2005701//ESTs, Highly similar to BUTYROPHILIN PRECURSOR [Bos tau

rus]//2.8e-68:376:93//Hs.9095:AA532630

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R-NT2RP2005712//Homo sapiens mRNA for KIAA0799 protein, partial cds//1.3 e-105:503:98//Hs.61638:AB018342
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R-NT2RP2005719//ESTs, Weakly similar to GPI-anchored protein p137 precur

D NTODDO 05700 / FGT / /2 F - 70 - 005 - 04 / /U - 140150 - 1402000

sor [H.sapiens] //5.4e-105:500:98//Hs.14298:AI417523

R-NT2RP2005722//EST//6.5e-76:395:94//Hs.142150:AA223982

R-NT2RP2005723//ESTs//1.5e-84:452:93//Hs.91753:R44455

R-NT2RP2005726//ESTs//3.5e-64:500:82//Hs.100526:A1223153

R-NT2RP2005741//ESTs//4.7e-60:333:93//Hs.107242:R40258

R-NT2RP2005748//ESTs//3.4e-102:498:97//Hs.82660:N78064

R-NT2RP2005752//Homo sapiens TNFR-related death receptor-6 (DR6) mRNA, c omplete cds//4.3e-42:223:96//Hs.159651:AF068868

R-NT2RP2005753//Homo sapiens I-1 receptor candidate protein mRNA, comple te cds//1.2e-104:494:98//Hs.26285:AF082516

R-NT2RP2005763//ESTs//1.1e-97:456:99//Hs.65412:AI362163

R-NT2RP2005767//ESTs//8.0e-38:204:96//Hs.18460:AA193463

R-NT2RP2005773//ESTs, Highly similar to PYRROLINE-5-CARBOXYLATE REDUCTA

SE [Homo sapiens] //5.4e-112:559:96//Hs.14214:AI189379

R-NT2RP2005775//ESTs, Highly similar to NEUROLYSIN PRECURSOR [Sus scrof

a]//3.0e-108:544:96//Hs.22151:AI214321

R-NT2RP2005781//ESTs//1.7e-43:217:99//Hs.144391:AA365664

R-NT2RP2005784//EST//0.0071:217:60//Hs.117332:AA699724

R-NT2RP2005804//ESTs//8.8e-107:512:98//Hs.15496:W44398

R-NT2RP2005812//ESTs//9.0e-76:359:99//Hs.113937:A1298746

R-NT2RP2005815//ESTs//5.5e-76:363:99//Hs.136230:AA594981

R-NT2RP2005835//ESTs//1.5e-100:541:94//Hs.86813:N25122

R-NT2RP2005841//ESTs//2.8e-105:556:92//Hs.69993:AA628403

R-NT2RP2005853//EST//2.0e-13:219:70//Hs.134016:AI076062

R-NT2RP2005857//ESTs//1.0e-115:576:96//Hs.30663:AI338462

R-NT2RP2005859//ESTs//7.3e-116:571:97//Hs.85986:AA195105

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R-NT2RP2005868//EST//0.00023:320:61//Hs.149689:AI284133
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R-NT2RP2005890//ESTs//1.0e-96:466:98//Hs.122579:AA766315

R-NT2RP2005901//ESTs//8.3e-116:548:98//Hs.66296:AI125268

R-NT2RP2005908//ESTs, Weakly similar to weakly similar to gastrula zinc

finger protein [C.elegans] //2.4e-73:397:94//Hs.16667:T92427

R-NT2RP2005933//ESTs, Highly similar to nucleoporin p54 [R.norvegicus] //

2.8e-114:560:97//Hs.9082:AA873170

R-NT2RP2005942//ESTs//5.6e-117:582:96//Hs.146123:AI338419

R-NT2RP2005980//ESTs//6.9e-101:478:98//Hs.43145:AA776988

R-NT2RP2006023//Homo sapiens PYRIN (MEFV) mRNA, complete cds//8.5e-51:39

8:80//Hs.113283:AF018080

R-NT2RP2006038//ESTs//0.025:284:59//Hs.97852:AA404347

R-NT2RP2006043//ESTs, Weakly similar to HYPOTHETICAL 37.0 KD PROTEIN B04

95.8 IN CHROMOSOME II [C.elegans] //1.2e-50:278:94//Hs.7194:AI185631

R-NT2RP2006052//ESTs//5.0e-52:272:95//Hs.99545:AA461492

R-NT2RP2006069//ESTs//1.8e-90:495:93//Hs.43654:AA522714

R-NT2RP2006071//ESTs//1.5e-38:218:94//Hs.107882:W72093

R-NT2RP2006098//ESTs//2.9e-105:540:95//Hs.26860:N56918

R-NT2RP2006100//Human organic anion transporting polypeptide (OATP) mRNA

, complete cds//0.031:254:62//Hs.46440:U21943

R-NT2RP2006103//ESTs//1.5e-86:416:98//Hs.152114:AA401365

R-NT2RP2006141//ESTs//5.3e-88:432:98//Hs.77480:AA100522

R-NT2RP2006166//Homo sapiens LIM protein mRNA, complete cds//2.8e-17:255

:72//Hs.154103:AF061258

R-NT2RP2006184//ESTs//8.4e-101:487:98//Hs.58009:W69435

R-NT2RP2006186//Homo sapiens mRNA for KIAA0654 protein, partial cds//6.1

e-110:553:95//Hs.109299:AB014554

R-NT2RP2006196//Human clone 23960 mRNA sequence//0.0037:48:100//Hs.15129

3:U79276

R-NT2RP2006200//ESTs//6.5e-77:398:96//Hs.163953:R01398

R-NT2RP2006219//H.sapiens mRNA for DGCR6 protein//1.2e-94:532:90//Hs.153

910:X96484

R-NT2RP2006237//ESTs//1.2e-57:305:95//Hs.86149:AI341312

R-NT2RP2006238//ESTs, Highly similar to rA8 [R.norvegicus] //1.5e-29:183:

91//Hs.4048:AA404253

R-NT2RP2006258//ESTs//3.2e-87:462:94//Hs.141556:N49928

R-NT2RP2006261//ESTs//3.4e-57:326:92//Hs.22523:W02999

R-NT2RP2006312//Homo sapiens BAF57 (BAF57) gene, complete cds//4.7e-96:4

81:97//Hs.3404:AF035262

R-NT2RP2006320//EST//3.4e-21:335:65//Hs.141603:N66015

R-NT2RP2006321//ESTs, Moderately similar to karyopherin beta 3 [H.sapien

s]//1.9e-89:460:96//Hs.21889:N78664

R-NT2RP2006323//ESTs//3.5e-91:439:98//Hs.61697:AI081771

R-NT2RP2006333//ESTs//4.9e-38:301:82//Hs.155999:AA196412

R-NT2RP2006334//EST//3.1e-45:264:91//Hs.149599:AI282321

R-NT2RP2006365//ESTs//2.9e-81:417:95//Hs.11814:W44411

R-NT2RP2006393//Cytochrome P450, subfamily I (aromatic compound-inducibl

e), polypeptide 2//3.9e-48:403:77//Hs.1361:M55053

R-NT2RP2006436//Homo sapiens mRNA for small GTP-binding protein, complet

e cds//1.4e-27:155:76//Hs.115325:D84488

R-NT2RP2006441//ESTs//6.0e-108:529:97//Hs.101282:N45092

R-NT2RP2006454//ESTs//9.2e-20:110:99//Hs.144687:AI341146

R-NT2RP2006456//ESTs//7.1e-91:508:92//Hs.12488:W63595

R-NT2RP2006464//Homo sapiens mRNA for AND-1 protein//2.1e-109:524:97//Hs

.72160:AJ006266

R-NT2RP2006467//EST//0.99:140:61//Hs.146958:AI174478

R-NT2RP2006472//ESTs//3.3e-92:473:95//Hs.29216:AA916679

R-NT2RP2006534//ESTs//1.2e-83:394:99//Hs.162116:AA524947

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R-NT2RP2006554//ESTs//1.0e-87:460:95//Hs.47095:AA181474
R-NT2RP2006565//ESTs//3.2e-24:129:100//Hs.13499:AI299886
R-NT2RP2006571//ESTs//2.6e-56:306:94//Hs.98370:AA316622
R-NT2RP2006573//ESTs//2.0e-112:533:98//Hs.18685:AI393829
R-NT2RP2006598//ESTs, Weakly similar to retinoid X receptor interacting
protein [M.musculus] //4.1e-109:542:97//Hs.7889:AI337112
R-NT2RP3000002//ESTs//1.3e-08:399:59//Hs.126044:AI301598
R-NT2RP3000031//Homo sapiens mRNA for histone deacetylase-like protein (
JM21)//1.9e-116:560:97//Hs.6764:AJ011972
R-NT2RP3000046//Small inducible cytokine A5 (RANTES)//1.9e-57:312:85//Hs
.155464:AF088219
R-NT2RP3000047//EST//0.91:130:66//Hs.140208:AA702213
R-NT2RP3000050//ESTs, Weakly similar to putative p150 [H.sapiens]//3.1e-
41:249:90//Hs.156155:AI222202
R-NT2RP3000055//EST//2.4e-19:146:86//Hs.160497:AI255095
R-NT2RP3000072//ESTs//2.2e-82:424:96//Hs.21542:N49574
R-NT2RP3000080//ESTs//2.1e-29:186:89//Hs.153372:AA424029
R-NT2RP3000085//ESTs//4.5e-101:482:98//Hs.47649:AA838715
R-NT2RP3000109//ESTs//9.5e-97:455:99//Hs.17731:AI342241
R-NT2RP3000134//EST//4.7e-106:497:99//Hs.125531:AA884000
R-NT2RP3000142//Homo sapiens mRNA for KIAA0592 protein, partial cds//1.2
e-116:578:96//Hs.13273:AB011164
R-NT2RP3000149//ESTs//7.7e-62:361:90//Hs.6649:N93418
R-NT2RP3000186
R-NT2RP3000197//ESTs//1.5e-75:436:91//Hs.140931:R51882
R-NT2RP3000207//ESTs//1.3e-98:468:98//Hs.126908:AA933091
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R-NT2RP3000220//ESTs//2.2e-27:144:99//Hs.106861:R61306 R-NT2RP3000233//EST//7.8e-77:368:99//Hs.49075:N64817

R-NT2RP3000235//ESTs//0.43:82:74//Hs.132828:AI032819

R-NT2RP3000247//EST//2.2e-97:459:99//Hs.127928:AA969239

R-NT2RP3000251

R-NT2RP3000252//ESTs, Weakly similar to Lpg15p [S.cerevisiae] //2.0e-108:

532:97//Hs.111086:AI379177

R-NT2RP3000255//EST//0.67:93:67//Hs.120579:AA743073

R-NT2RP3000267//ESTs//8.5e-108:542:95//Hs.24984:AA534446

R-NT2RP3000299//ESTs, Weakly similar to enhancer of filmentation 1 [H.sa

piens] //3.6e-103:516:96//Hs.4894:AI191323

R-NT2RP3000312//ESTs//1.3e-100:493:97//Hs.29379:AI094117

R-NT2RP3000320//ESTs//3.2e-95:538:91//Hs.118793:AA192438

R-NT2RP3000324

R-NT2RP3000333//ESTs//6.0e-39:194:100//Hs.119238:AA476267

R-NT2RP3000341//ESTs//0.51:251:61//Hs.94090:AA777689

R-NT2RP3000348//EST//1.8e-80:389:98//Hs.145944:AI276225

R-NT2RP3000350//ESTs, Weakly similar to Lpg15p [S.cerevisiae]//3.1e-110:

556:96//Hs.111086:AI379177

R-NT2RP3000359//EST//4.9e-61:340:92//Hs.126495:AA913741

R-NT2RP3000361//ESTs, Weakly similar to PRE-MRNA SPLICING FACTOR PRP6 [S

.cerevisiae] //4.8e-91:439:97//Hs.31334:AI144423

R-NT2RP3000366//EST//0.20:392:57//Hs.149652:AI283303

R-NT2RP3000397//EST//8.7e-26:150:94//Hs.124617:AA855106

R-NT2RP3000403//Homo sapiens formin binding protein 21 mRNA, complete cd

s//4.2e-111:529:98//Hs.28307:AF071185

R-NT2RP3000418//EST//3.3e-09:202:67//Hs.117189:AA682947

R-NT2RP3000433

R-NT2RP3000439//ESTs//3.1e-79:426:92//Hs.26548:W26340

R-NT2RP3000441//ESTs//6.3e-84:420:97//Hs.137482:AA421254

R-NT2RP3000449//ESTs//4.9e-93:435:99//Hs.54617:AI379102

R-NT2RP3000451//ESTs//2.3e-89:439:97//Hs.9196:AA748492

R-NT2RP3000456//Homo Sapiens (clone B3B3E13) chromosome 4p16.3 DNA fragm

ent//1.8e-23:347:70//Hs.114963:L34408

R-NT2RP3000484//Heparin cofactor II//0.98:166:62//Hs.1478:M58600

R-NT2RP3000487//ESTs//0.012:384:60//Hs.88684:AA885141

R-NT2RP3000512//Homeo box B3//2.0e-69:377:93//Hs.49931:X16667

R-NT2RP3000526//ESTs//1.6e-91:432:99//Hs.38042:AA187151

R-NT2RP3000527//ESTs//1.2e-100:518:94//Hs.104557:AI078161

R-NT2RP3000531//ESTs, Weakly similar to TH1 protein [D.melanogaster] //0.

95:85:71//Hs.5184:AA709151

R-NT2RP3000542//ESTs//2.6e-53:375:84//Hs.44158:N30180

R-NT2RP3000561//EST//1.1e-13:170:75//Hs.148421:AI198036

R-NT2RP3000562//Human mRNA for KIAA0233 gene, complete cds//0.97:141:68/

/Hs.79077:D87071

R-NT2RP3000578//ESTs//2.6e-68:324:100//Hs.5445:AA779447

R-NT2RP3000582//ESTs//2.1e-25:131:80//Hs.152465:AA563785

R-NT2RP3000584//ESTs//1.8e-97:460:99//Hs.120698:AI241511

R-NT2RP3000590//ESTs//2.0e-97:453:100//Hs.105355:AA953817

R-NT2RP3000592//ESTs//2.8e-91:432:99//Hs.144304:AI190916

R-NT2RP3000596//Human mRNA for KIAA0314 gene, partial cds//1.5e-09:447:5

8//Hs.155045:AB002312

R-NT2RP3000599//ESTs//3.8e-93:437:99//Hs.23971:AA829880

R-NT2RP3000605//ESTs//4.2e-111:554:96//Hs.40780:AA422049

R-NT2RP3000622//ESTs//2.0e-100:473:99//Hs.11387:AI127394

R-NT2RP3000624//ESTs, Weakly similar to KIAA0256 [H.sapiens]  $\frac{1}{5.4e-115:5}$ 

45:98//Hs.4857:AI090739

R-NT2RP3000628//Homo sapiens mRNA for KIAA0772 protein, complete cds//4.

3e-49:397:80//Hs.15519:AB018315

R-NT2RP3000632//ESTs, Moderately similar to cyclin-selective ubiquitin c

arrier protein [H.sapiens] //6.3e-92:434:99//Hs.152517:AA719022

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R-NT2RP3000644//ESTs//1.0e-44:306:84//Hs.155498:W27084
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R-NT2RP3000661//ESTs//3.1e-95:470:97//Hs.126069:W76185

R-NT2RP3000665//ESTs//3.3e-95:503:94//Hs.34313:W81185

R-NT2RP3000685//ESTs//2.7e-99:515:94//Hs.9711:R60873

R-NT2RP3000690//ESTs//3.3e-88:414:99//Hs.146589:AI085578

R-NT2RP3000736

R-NT2RP3000742//ESTs, Highly similar to 1-PHOSPHATIDYLINOSITOL-4,5-BISP

HOSPHATE PHOSPHODIESTERASE DELTA 1 [Rattus norvegicus] //1.8e-07:114:75//

Hs.136065:W21960

R-NT2RP3000753//ESTs//3.1e-99:461:100//Hs.150901:AI310447

R-NT2RP3000759//ESTs//2.0e-74:384:95//Hs.104222:AA207243

R-NT2RP3000815//ESTs//8.5e-97:455:99//Hs.158897:AI378583

R-NT2RP3000825//EST//0.0089:343:59//Hs.42897:N20810

R-NT2RP3000826//EST//3.4e-33:342:74//Hs.162236:AA551582

R-NT2RP3000836//ESTs//6.8e-24:181:84//Hs.134464:AI151081

R-NT2RP3000841//ESTs//4.5e-93:491:93//Hs.23618:H98082

R-NT2RP3000845//ESTs//2.4e-88:473:93//Hs.8312:AA813022

R-NT2RP3000847//ESTs//9.3e-89:460:95//Hs.154106:AI051657

R-NT2RP3000850

R-NT2RP3000852//Fibrillin 2//0.55:237:63//Hs.79432:U03272

R-NT2RP3000859//ESTs//1.4e-96:509:94//Hs.7187:AA576895

R-NT2RP3000865//EST//4.8e-23:461:66//Hs.162088:AA505741

R-NT2RP3000868//ESTs//5.4e-78:430:93//Hs.102796:N70837

R-NT2RP3000869//ESTs//8.5e-77:397:94//Hs.84484:AI014673

R-NT2RP3000875//Mevalonate kinase//3.8e-78:531:84//Hs.75138:M88468

R-NT2RP3000901//ESTs//2.1e-95:466:97//Hs.10647:AA428217

R-NT2RP3000904//ESTs//1.6e-79:380:99//Hs.100850:AA479385

R-NT2RP3000917//ESTs, Highly similar to mouse Dhm1 protein [M.musculus]/

/9.5e-113:566:96//Hs.5900:AA035728

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R-NT2RP3000919
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R-NT2RP3000968//40S RIBOSOMAL PROTEIN S15A//1.5e-25:375:71//Hs.2953:X844

R-NT2RP3000980//ESTs//3.3e-72:364:96//Hs.9536:AA114178

R-NT2RP3000994//ESTs//3.5e-111:537:97//Hs.21146:AA683542

R-NT2RP3001004//ESTs//9.6e-91:456:96//Hs.58974:W87405

R-NT2RP3001007//ESTs//6.7e-99:482:97//Hs.117737:AI088029

R-NT2RP3001055//ESTs//0.0012:294:60//Hs.66479:AA863044

R-NT2RP3001057//ESTs, Highly similar to ZINC FINGER PROTEIN HF.12 [Homo sapiens] //5.6e-102:486:99//Hs.145956:AA007349

R-NT2RP3001081//Retinal pigment epithelium-specific protein (65kD)//0.00

12:447:58//Hs.2133:U18991

R-NT2RP3001084//ESTs//4.3e-102:528:96//Hs.25277:W87874

R-NT2RP3001096//ESTs//1.1e-110:540:96//Hs.42824:AA873182

R-NT2RP3001107//ESTs//7.6e-100:478:98//Hs.99669:AA287832

R-NT2RP3001109//DNA polymerase gamma//0.0014:50:100//Hs.80961:U60325

R-NT2RP3001111//ESTs, Weakly similar to Trf-proximal protein [D.melanoga

ster]//3.2e-104:543:95//Hs.93796:C06063

R-NT2RP3001113//ESTs//3.3e-100:467:99//Hs.97757:AA401575

R-NT2RP3001115//Oxytocin receptor//7.9e-30:505:67//Hs.2820:X64878

R-NT2RP3001116//ESTs//4.6e-41:229:96//Hs.58412:W74779

R-NT2RP3001119//ESTs//6.9e-88:478:92//Hs.19469:AA203180

R-NT2RP3001120//ESTs//3.1e-82:430:93//Hs.110956:AI190166

R-NT2RP3001126//ESTs//4.4e-52:264:96//Hs.25264:R78188

R-NT2RP3001133//ESTs//4.7e-105:541:94//Hs.73239:AA573761

R-NT2RP3001140//Homo sapiens mRNA for KIAA0762 protein, partial cds//2.6

e-115:549:97//Hs.5378:AB018305

R-NT2RP3001147//ESTs, Highly similar to GTPASE ACTIVATING PROTEIN ROTUN

D [Drosophila melanogaster] // 9.6e-113:552:97 // Hs. 23900: U82984

R-NT2RP3001150//ESTs//2.9e-90:444:97//Hs.99601:AA760717

R-NT2RP3001155//Homo sapiens mRNA for AND-1 protein//9.4e-118:563:98//Hs

.72160:AJ006266

R-NT2RP3001176//ESTs//1.8e-110:534:98//Hs.58650:AI074460

R-NT2RP3001214//ESTs//1.7e-109:545:96//Hs.24481:AA573139

R-NT2RP3001216//EST//0.00098:128:66//Hs.160493:AI254963

R-NT2RP3001221//EST//0.010:106:66//Hs.147774:AI221196

R-NT2RP3001232//ESTs//1.5e-101:518:94//Hs.21630:AA778399

R-NT2RP3001236//ESTs, Highly similar to KIAA0377 [H.sapiens] //2.8e-89:46

2:95//Hs.116793:AA779588

R-NT2RP3001239//ESTs, Moderately similar to NEURAXIN [Rattus norvegicus

]//5.2e-82:466:91//Hs.66048:AA524416

R-NT2RP3001245//EST//0.53:237:62//Hs.161131:AI417631

R-NT2RP3001253//ESTs//1.7e-105:535:96//Hs.42315:AI222997

R-NT2RP3001260//EST//0.16:144:62//Hs.126856:AA932135

R-NT2RP3001268//Human Aac11 (aac11) mRNA, complete cds//0.12:494:59//Hs.

151031:U83857

R-NT2RP3001272//ESTs//1.4e-92:436:99//Hs.149831:AI383965

R-NT2RP3001274//ESTs//3.9e-81:424:95//Hs.113184:N25651

R-NT2RP3001281//EST//3.1e-60:298:98//Hs.149230:AI247332

R-NT2RP3001307//EST//0.42:215:62//Hs.126165:AA868691

R-NT2RP3001318//ESTs//4.1e-74:363:97//Hs.130832:H92571

R-NT2RP3001325//ESTs//1.7e-106:534:96//Hs.21214:H98989

R-NT2RP3001338//Human protein tyrosine phosphatase sigma mRNA, complete

cds//0.22:199:63//Hs.159534:U35234

R-NT2RP3001339//Homo sapiens mRNA for KIAA0451 protein, complete cds//3.

9e-114:566:96//Hs.18586:AB007920

R-NT2RP3001340//ESTs//1.1e-72:411:92//Hs.21135:W81653

R-NT2RP3001355//ESTs//9.0e-103:521:95//Hs.99486:AA776798

R-NT2RP3001374//ESTs//2.7e-82:395:98//Hs.117102:AA993090

R-NT2RP3001383//ESTs//3.6e-10:118:78//Hs.111055:AA169778

R-NT2RP3001384//ESTs, Weakly similar to A-kinase anchor protein 95, AKAP

95 [R.norvegicus] //5.7e-92:522:90//Hs.96200:AA218942

R-NT2RP3001392//ESTs//5.9e-62:296:100//Hs.125034:AA907375

R-NT2RP3001396//ESTs//3.7e-111:528:98//Hs.22612:AA152232

R-NT2RP3001398//ESTs//2.6e-94:449:99//Hs.146332:AI276628

R-NT2RP3001399//ESTs//2.6e-82:401:97//Hs.7932:AI041186

R-NT2RP3001407//ESTs//2.2e-101:488:97//Hs.71573:AA496898

R-NT2RP3001420//EST//7.4e-44:394:79//Hs.137041:AA877817

R-NT2RP3001426//Homo sapiens clone 24616 mRNA sequence//3.6e-106:550:94/

/Hs.6957:AF052158

R-NT2RP3001427//ESTs//1.3e-87:374:97//Hs.5457:H05692

R-NT2RP3001428//Neurotrophic tyrosine kinase, receptor, type 1//4.7e-96:

533:91//Hs.85844:X66397

R-NT2RP3001432//ESTs//1.9e-102:523:95//Hs.132978:AI041374

R-NT2RP3001447//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING

ENTRY !!!! [H.sapiens] //5.1e-101:482:98//Hs.124135:AA910560

R-NT2RP3001449//ESTs//2.2e-99:502:96//Hs.7834:N45994

R-NT2RP3001453//Small inducible cytokine A5 (RANTES)//8.1e-45:295:85//Hs

.155464:AF088219

R-NT2RP3001457//ESTs//1.5e-52:256:99//Hs.117982:AA644658

R-NT2RP3001459//ESTs//3.4e-62:299:99//Hs.146098:AA167280

R-NT2RP3001472//ESTs//4.8e-108:540:96//Hs.69594:N37009

R-NT2RP3001490//ESTs//3.5e-91:549:88//Hs.6606:AA211783

R-NT2RP3001495//Human oxidoreductase (HHCMA56) mRNA, complete cds//1.4e-

61:338:93//Hs.519:U13395

R-NT2RP3001497//Homo sapiens multiple membrane spanning receptor TRC8 (T

RC8) mRNA, complete cds//6.8e-112:549:97//Hs.28285:AF064801

R-NT2RP3001527//ESTs//4.4e-105:543:95//Hs.158761:AA631047

R-NT2RP3001529//Homo sapiens tapasin (NGS-17) mRNA, complete cds//7.9e-5

9:427:83//Hs.5247:AF029750

R-NT2RP3001538//ESTs//1.6e-94:521:92//Hs.6846:AA209463

R-NT2RP3001554//ESTs, Moderately similar to NEURAXIN [Rattus norvegicus

]//2.8e-76:392:95//Hs.66048:AA524416

R-NT2RP3001580//ESTs//3.7e-82:398:98//Hs.23490:N49477

R-NT2RP3001587//Homa sapiens mRNA for HRIHFB2115, partial cds//1.8e-09:8

6:88//Hs.4311:AB015337

R-NT2RP3001589//ESTs//0.0029:243:62//Hs.158924:AA605194

R-NT2RP3001607//EST//0.00096:76:78//Hs.140319:AA748328

R-NT2RP3001608//ESTs//3.8e-105:525:96//Hs.144655:AI279798

R-NT2RP3001621//ESTs//3.3e-108:535:97//Hs.47378:AI193598

R-NT2RP3001629

R-NT2RP3001634//Homo sapiens TRIAD1 type I mRNA, complete cds//2.7e-109:

541:96//Hs.9899:AF099149

R-NT2RP3001642//ESTs//6.0e-105:525:96//Hs.3376:AA915989

R-NT2RP3001646//ESTs//4.8e-95:523:92//Hs.64036:AA127709

R-NT2RP3001671//ESTs//0.0013:367:60//Hs.106090:AA457030

R-NT2RP3001672//ESTs//3.4e-37:191:98//Hs.57475:AI382189

R-NT2RP3001676//ESTs//1.5e-81:408:97//Hs.142547:N67648

R-NT2RP3001678//ESTs//4.3e-85:405:99//Hs.121915:AI268225

R-NT2RP3001679//ESTs//3.4e-100:545:93//Hs.5943:AI222558

R-NT2RP3001688//Human mRNA for KIAA0392 gene, partial cds//8.6e-46:301:8

7//Hs.40100:AB002390

R-NT2RP3001690//ESTs//3.3e-111:542:97//Hs.86149:AI341312

R-NT2RP3001708//ESTs//1.4e-96:349:95//Hs.17975:AA868618

R-NT2RP3001712//ESTs//9.3e-14:102:92//Hs.78041:N29669

R-NT2RP3001716//ESTs, Highly similar to BONE MORPHOGENETIC PROTEIN 1 PR

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ECURSOR [Mus musculus] //4.1e-80:444:91//Hs.6823:W18181
R-NT2RP3001724//ESTs//1.8e-109:547:96//Hs.14570:AI422099
R-NT2RP3001730//ESTs//4.1e-98:528:92//Hs.155115:AA669923
R-NT2RP3001739//ESTs//4.4e-87:444:94//Hs.27239:W27810
R-NT2RP3001752//ESTs//6.1e-93:490:94//Hs.4210:AA740440
R-NT2RP3001753//ESTs//2.5e-82:395:99//Hs.126435:AA912968
R-NT2RP3001764//ESTs, Weakly similar to protein-tyrosine phosphatase [H.
sapiens] //1.2e-87:450:96//Hs.20281:N92517
R-NT2RP3001777//ESTs//1.1e-86:360:97//Hs.100530:H06725
R-NT2RP3001782//Homo sapiens mRNA for KIAA0459 protein, partial cds//4.2
e-113:549:97//Hs.28169:AB007928
R-NT2RP3001792//ESTs, Weakly similar to F35C12.2 [C.elegans]//1.1e-21:11
9:99//Hs.44268:AA455900
R-NT2RP3001799//OX40L RECEPTOR PRECURSOR//2.8e-45:374:79//Hs.129780:X759
62
R-NT2RP3001819//ESTs//2.6e-87:432:96//Hs.10414:AI291292
R-NT2RP3001844//ESTs//0.024:128:67//Hs.25131:N50117
R-NT2RP3001854//ESTs//1.4e-92:490:92//Hs.15165:N52900
R-NT2RP3001855//ESTs//1.9e-66:361:93//Hs.10043:D81792
R-NT2RP3001896//ESTs//1.4e-96:343:97//Hs.24809:N73642
R-NT2RP3001898//ESTs//4.1e-90:515:91//Hs.4867:AA521180
R-NT2RP3001915//ESTs//4.4e-32:175:95//Hs.24641:AA954666
R-NT2RP3001926//ESTs, Highly similar to NUCLEOLYSIN TIA-1 [Homo sapiens
]//1.0e-40:202:100//Hs.24709:AI123300
R-NT2RP3001929//ESTs//6.6e-84:449:94//Hs.26962:AA682781
R-NT2RP3001931//ESTs//1.0e-41:214:99//Hs.32360:AA534737
R-NT2RP3001938//ESTs. Highly similar to SPORULATION-SPECIFIC PROTEIN 1
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[Saccharomyces cerevisiae] //1.3e-95:483:96//Hs.5771:W74591

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R-NT2RP3001943//ESTs//1.2e-23:169:88//Hs.103930:AA160990

R-NT2RP3001944//ESTs//2.0e-90:439:97//Hs.103380:AI291325

R-NT2RP3001969//ESTs//0.95:133:65//Hs.131669:AI025889

R-NT2RP3001989//ESTs, Weakly similar to C01A2.4 [C.elegans]//8.9e-64:310

:99//Hs.11449:AI201540

R-NT2RP3002002//ESTs//2.1e-95:562:89//Hs.5997:AA897088

R-NT2RP3002004//H.sapiens mRNA for FAST kinase//1.6e-42:335:82//Hs.75087

:X86779

R-NT2RP3002007//ESTs//0.12:184:66//Hs.94030:AA846729

R-NT2RP3002014//Small inducible cytokine A5 (RANTES)//6.8e-47:291:89//Hs

.155464:AF088219

R-NT2RP3002033

R-NT2RP3002045//ESTs//1.0e-92:555:88//Hs.106411:W29081

R-NT2RP3002054//EST//0.45:155:63//Hs.5656:D20426

R-NT2RP3002056//ESTs//1.4e-95:504:93//Hs.17428:AI365221

R-NT2RP3002057//Human mRNA for KIAA0152 gene, complete cds//0.69:127:66/

/Hs.90438:D63486

R-NT2RP3002062

R-NT2RP3002063//ESTs//2.1e-113:552:97//Hs.9591:AA069657

R-NT2RP3002081//ESTs//5.5e-43:212:100//Hs.124852:AA969139

R-NT2RP3002097//EST//2.3e-10:80:91//Hs.102717:N59148

R-NT2RP3002102

R-NT2RP3002108

R-NT2RP3002146//ESTs//5.5e-58:296:97//Hs.65328:AA625385

R-NT2RP3002147//EST//2.5e-53:387:81//Hs.147928:AI249703

R-NT2RP3002151//ESTs, Highly similar to G1 TO S PHASE TRANSITION PROTEI

N 1 HOMOLOG [Homo sapiens] //6.2e-107:534:96//Hs.59523:AA602837

R-NT2RP3002163//ESTs//2.7e-106:520:97//Hs.21258:AA412293

R-NT2RP3002165//ESTs//7.4e-93:479:95//Hs.27299:AI074024

R-NT2RP3002166//ESTs//1.0:261:59//Hs.132817:AA593713

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R-NT2RP3002173//ESTs//2.7e-93:512:92//Hs.23648:H07120
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R-NT2RP3002181//ESTs//1.0e-84:435:96//Hs.47378:AI193598

R-NT2RP3002244//ESTs//2.7e-11:97:89//Hs.9412:W72446

R-NT2RP3002248//ESTs//4.3e-90:459:95//Hs.9848:AA130588

R-NT2RP3002255//ESTs//1.3e-45:289:88//Hs.9100:AA431672

R-NT2RP3002273//ESTs//2.3e-100:489:97//Hs.8258:AA744743

R-NT2RP3002276//ESTs//1.2e-50:306:91//Hs.16160:AA778171

R-NT2RP3002303//ESTs//1.1e-67:323:99//Hs.129761:AA836898

R-NT2RP3002304//ESTs//2.8e-86:405:99//Hs.29643:AA418500

R-NT2RP3002330//ESTs, Weakly similar to G1 TO S PHASE TRANSITION PROTEIN

1 HOMOLOG [H.sapiens] //1.8e-19:136:87//Hs.106928:AI041737

R-NT2RP3002343//ESTs//1.0e-42:260:93//Hs.7797:W25667

R-NT2RP3002351//Homo sapiens 9G8 splicing factor mRNA, complete cds//0.0 048:221:64//Hs.556:L41887

R-NT2RP3002352//Homo sapiens mRNA for protein encoded by cxorf5 (71-7A) gene//5.8e-105:516:94//Hs.6483:Y16355

R-NT2RP3002455//Homo sapiens mRNA for KIAA0678 protein, partial cds//1.5 e-103:524:95//Hs.12707:AB014578

R-NT2RP3002484//Human APRT gene for adenine phosphoribosyltransferase//0.54:108:71//Hs.28914:Y00486

R-NT2RP3002501//ESTs//2.7e-96:489:95//Hs.27335:N74185

R-NT2RP3002512//ESTs, Weakly similar to HYPOTHETICAL 31.0 KD PROTEIN R10

7.2 IN CHROMOSOME III [C.elegans] //3.2e-90:526:90//Hs.8083:AA521436

R-NT2RP3002529//ESTs, Highly similar to PUTATIVE VACUOLAR PROTEIN SORTI

NG-ASSOCIATED PROTEIN C2G11.03C [Schizosaccharomyces pombe] //3.8e-101:49

7:96//Hs.6650:AA843246

R-NT2RP3002545//Homo sapiens mRNA for KIAA0729 protein, partial cds//1.1

e-83:438:94//Hs.19542:AB018272

R-NT2RP3002549//ESTs//3.8e-98:493:96//Hs.7358:AA191673

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R-NT2RP3002566//Homo sapiens calcium-activated potassium channel (KCNN3)
 mRNA, complete cds//0.14:184:63//Hs.89230:AF031815
R-NT2RP3002587//Homo sapiens KIAA0420 mRNA, complete cds//2.0e-18:138:78
//Hs.129883:AB007880
R-NT2RP3002590//ESTs//2.9e-51:290:93//Hs.162942:AI243850
R-NT2RP3002602//Homo sapiens stannin mRNA, complete cds//5.5e-06:58:100/
/Hs.76691:AF070673
R-NT2RP3002603
R-NT2RP3002631//ESTs//4.8e-54:367:85//Hs.13109:AA192514
R-NT2RP3002659//ESTs//5.3e-30:229:85//Hs.152114:AA401365
R-NT2RP3002660//ESTs//1.9e-88:452:95//Hs.120146:AA708573
R-NT2RP3002663//EST//3.2e-89:469:95//Hs.105767:AA525172
R-NT2RP3002671//ESTs, Highly similar to ELONGATION FACTOR 2 [Drosophila
 melanogaster]//5.9e-109:537:97//Hs.19348:AA151678
R-NT2RP3002682//ESTs//2.3e-98:541:91//Hs.75844:AA115502
R-NT2RP3002687//ESTs//5.5e-103:498:97//Hs.72782:AA910871
R-NT2RP3002688//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT
RY !!!! [H.sapiens] //5.0e-101:524:95//Hs.32580:AI123601
R-NT2RP3002701//EST//0.87:131:63//Hs.161916:AA483169
R-NT2RP3002713//ESTs//4.7e-106:542:95//Hs.14479:AA160945
R-NT2RP3002763//ESTs//1.3e-54:290:94//Hs.142031:AA809159
R-NT2RP3002770//ESTs//0.047:275:61//Hs.122984:AA526973
R-NT2RP3002785//ESTs//2.4e-52:255:99//Hs.132959:AI376958
R-NT2RP3002799//EST//8.2e-61:321:94//Hs.140992:R71377
R-NT2RP3002810//EST//0.19:116:68//Hs.121810:AA775240
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R-NT2RP3002818//ESTs//1.3e-109:531:98//Hs.58924:AI348080

R-NT2RP3002861//ESTs//2.5e-84:429:95//Hs.23920:AA909678

R-NT2RP3002869//EST//0.00011:116:71//Hs.161606:AA019641

R-NT2RP3002876//ESTs//0.0024:182:63//Hs.117306:AA687262

R-NT2RP3002877//Homo sapiens X-ray repair cross-complementing protein 2

(XRCC2) mRNA, complete cds//8.1e-14:146:72//Hs.129727:AF035587

R-NT2RP3002909//Homo sapiens mRNA for KIAA0771 protein, partial cds//1.5

e-110:570:95//Hs.6162:AB018314

R-NT2RP3002911//ESTs//3.6e-92:436:99//Hs.143917:AI206286

R-NT2RP3002948//EST//1.0:102:65//Hs.144730:AI191975

R-NT2RP3002953//ESTs//1.8e-107:513:98//Hs.119693:AI201698

R-NT2RP3002955//Homo sapiens mRNA, chromosome 1 specific transcript KIAA

0492//0.23:563:56//Hs.127338:AB007961

R-NT2RP3002969//ESTs, Weakly similar to LONG-CHAIN-FATTY-ACID--COA LIGAS

E 1 [Saccharomyces cerevisiae] //2.0e-56:387:86//Hs.144597:W20143

R-NT2RP3002972//ESTs//1.7e-97:502:96//Hs.7274:AA476850

R-NT2RP3002978//ESTs//8.6e-104:498:98//Hs.118923:AA252116

R-NT2RP3002988//EST//1.2e-59:315:94//Hs.157743:AI360553

R-NT2RP3003008//ESTs//1.4e-97:515:94//Hs.6544:AA524423

R-NT2RP3003032//ESTs, Weakly similar to RETROVIRUS-RELATED POL POLYPROTE

IN [Mus musculus] //3.0e-100:528:94//Hs.90353:N98551

R-NT2RP3003059//ESTs//1.7e-76:398:95//Hs.102971:W05355

R-NT2RP3003061//ESTs//4.9e-82:414:96//Hs.99603:AI141912

R-NT2RP3003068//ESTs, Weakly similar to M18.3 [C.elegans] //5.9e-83:392:9

9//Hs.101364:AA534439

R-NT2RP3003071//ESTs//6.3e-85:399:99//Hs.109755:AA180809

R-NT2RP3003078//ESTs//1.0e-98:471:99//Hs.7995:AI359466

R-NT2RP3003101//EST//0.032:235:60//Hs.147920:AI202441

R-NT2RP3003121//ESTs//3.0e-47:238:97//Hs.43559:A1003520

R-NT2RP3003133//EST//1.5e-77:395:96//Hs.142150:AA223982

R-NT2RP3003138//ESTs, Highly similar to KINESIN-LIKE PROTEIN KIF4 [Mus

2 0 5 2

musculus //3.3e-107:535:96//Hs.27437:AA004208

R-NT2RP3003139//ESTs//2.5e-106:504:98//Hs.106795:AI271632

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R-NT2RP3003150//ESTs//1.6e-99:539:91//Hs.46500:AA129774
 R-NT2RP3003157//ESTs//1.5e-114:563:97//Hs.58608:AA081007
R-NT2RP3003185//ESTs//3.9e-93:443:98//Hs.9741:AI131226
 R-NT2RP3003193//ESTs//2.0e-37:428:71//Hs.33354:AA179944
 R-NT2RP3003197//ESTs//5.8e-56:312:94//Hs.7016:AA215796
 R-NT2RP3003203//EST//0.0073:212:63//Hs.161355:AI422634
R-NT2RP3003204//ESTs//7.4e-52:253:99//Hs.120146:AA708573
 R-NT2RP3003212//ESTs//1.8e-76:401:95//Hs.29067:N26107
 R-NT2RP3003230//ESTs, Highly similar to CORONIN [Dictyostelium discoide
 um] //2.0e-40:229:93//Hs.17377:AI078151
 R-NT2RP3003242//ESTs//8.3e-97:458:99//Hs.23057:AI290343
 R-NT2RP3003251//ESTs//1.5e-60:320:95//Hs.36495:AA151628
 R-NT2RP3003264//ESTs//2.1e-103:521:95//Hs.4094:AA173960
 R-NT2RP3003278//ESTs//8.2e-109:536:96//Hs.23788:AA524061
 R-NT2RP3003282//Homo sapiens dynamin (DNM) mRNA, complete cds//2.4e-102:
 550:93//Hs.11702:L36983
 R-NT2RP3003290//EST//4.3e-27:372:70//Hs.159131:AI384035
 R-NT2RP3003301//ESTs//4.4e-56:285:97//Hs.95370:AA601055
 R-NT2RP3003302//EST//7.2e-10:395:63//Hs.162554:AA584818
 R-NT2RP3003311//ESTs//4.2e-110:538:97//Hs.62180:AI341261
R-NT2RP3003313//ESTs//2.1e-106:531:96//Hs.22630:C05931
R-NT2RP3003327//ESTs//4.3e-102:518:95//Hs.120355:AA625445
 R-NT2RP3003330//ESTs//8.6e-104:497:97//Hs.72071:AI125289
 R-NT2RP3003344//ESTs//2.5e-105:494:99//Hs.112188:AA872993
 R-NT2RP3003346//ESTs//1.0:123:69//Hs.116029:AA813102
 R-NT2RP3003353//EST//0.0014:162:68//Hs.149191:AI246155
 R-NT2RP3003377//EST//4.5e-15:119:85//Hs.148129:AA885567
 R-NT2RP3003384//EST//0.0057:86:74//Hs.127735:AA962272
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R-NT2RP3003385//ESTs//0.64:347:59//Hs.5646:W72721

R-NT2RP3003403//ESTs, Weakly similar to LINE-1 REVERSE TRANSCRIPTASE HOM

OLOG [H.sapiens] //2.2e-24:418:67//Hs.139488:AI124095

R-NT2RP3003409//ESTs//5.3e-98:479:97//Hs.155198:AA767372

R-NT2RP3003411//ESTs//4.8e-86:416:97//Hs.129059:AA126041

R-NT2RP3003427//ESTs//7.4e-103:510:96//Hs.25303:AA641023

R-NT2RP3003433//ESTs//3.5e-85:405:99//Hs.63131:AA664156

R-NT2RP3003464//Homo sapiens rab3-GAP regulatory domain mRNA, complete c

ds//3.6e-97:479:96//Hs.14934:AF004828

R-NT2RP3003490//Homo sapiens mRNA for KIAA0725 protein, partial cds//4.1

e-102:527:93//Hs.26450:AB018268

R-NT2RP3003491//ESTs, Weakly similar to No definition line found [C.eleg

ans] //4.0e-106:549:94//Hs.7886:AI057529

R-NT2RP3003500//Human RP3 mRNA, complete cds//0.66:401:60//Hs.75307:U025

56

R-NT2RP3003543//Human clone A9A2BRB7 (CAC)n/(GTG)n repeat-containing mRN

A//4.1e-33:217:88//Hs.8068:U00952

R-NT2RP3003552//ESTs//3.1e-106:546:94//Hs.101754:AI123430

R-NT2RP3003555//ESTs//3.4e-106:537:95//Hs.85550:AA187681

R-NT2RP3003564

R-NT2RP3003572//ESTs//1.2e-20:122:88//Hs.8253:N48721

R-NT2RP3003576//ESTs//2.7e-71:394:94//Hs.151136:R99944

R-NT2RP3003589//EST//0.58:242:59//Hs.130804:AA894759

R-NT2RP3003625//ESTs//7.6e-41:349:80//Hs.140608:N53448

R-NT2RP3003656//Human LIM protein (LPP) mRNA, partial cds//0.26:222:60//

Hs.17217:U49957

R-NT2RP3003659//ESTs//2.0e-113:547:97//Hs.23389:AA769310

R-NT2RP3003665//ESTs//1.6e-80:415:95//Hs.141084:H11714

R-NT2RP3003672

R-NT2RP3003686//ESTs//6.8e-114:552:97//Hs.43299:N23036

R-NT2RP3003701//ESTs//2.1e-16:282:66//Hs.115512:AI208768

R-NT2RP3003716//ESTs//2.1e-45:195:91//Hs.41296:N71923

R-NT2RP3003726//Homo sapiens mRNA for KIAA0757 protein, complete cds//5.

6e-103:492:97//Hs.48513:AB018300

R-NT2RP3003746//ESTs//1.9e-85:411:98//Hs.54835:AI050863

R-NT2RP3003795//EST//6.2e-97:459:99//Hs.134769:AI089747

R-NT2RP3003799//ESTs//2.8e-62:337:94//Hs.124023:H18913

R-NT2RP3003800//PROTO-ONCOGENE TYROSINE-PROTEIN KINASE SRC//8.9e-108:551

:95//Hs.115742:AF077754

R-NT2RP3003805//ESTs//2.2e-103:490:99//Hs.9412:W72446

R-NT2RP3003809//ESTs, Highly similar to SAV PROTEIN [Sulfolobus acidoca

ldarius]//3.4e-89:456:95//Hs.5555:AI285198

R-NT2RP3003819//Interleukin 10//3.3e-43:173:89//Hs.2180:M57627

R-NT2RP3003825//ESTs//1.6e-66:485:80//Hs.7405:W27761

R-NT2RP3003828//ESTs, Weakly similar to unknown [H.sapiens]//9.6e-98:511

:95//Hs.26955:AI333224

R-NT2RP3003831//ESTs//2.2e-38:317:79//Hs.142173:AA757743

R-NT2RP3003833//Homo sapiens clones 24718 and 24825 mRNA sequence//5.2e-

110:541:97//Hs.25300:AF070611

R-NT2RP3003842//EST//9.9e-44:506:70//Hs.139093:AA166888

R-NT2RP3003846//ESTs//4.6e-10:66:100//Hs.74924:AI332962

R-NT2RP3003870//ESTs//3.4e-82:449:92//Hs.122691:AA152298

R-NT2RP3003876//ESTs//1.9e-89:449:96//Hs.45046:N40170

R-NT2RP3003914//ESTs//1.3e-99:470:98//Hs.118966:AA926726

R-NT2RP3003918//ESTs//1.3e-79:417:94//Hs.5005:W25933

R-NT2RP3003932//ESTs//6.0e-83:427:94//Hs.93581:H50221

R-NT2RP3003989//ESTs//4.8e-76:403:93//Hs.127243:W80409

R-NT2RP3003992//ESTs//2.4e-88:508:90//Hs.134200:D19593

R-NT2RP3004013//ESTs//3.7e-111:551:97//Hs.105108:AA781142

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R-NT2RP3004016//ESTs//1.7e-81:394:98//Hs.63368:AA613714
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R-NT2RP3004041

R-NT2RP3004051//ESTs//3.5e-69:386:93//Hs.51347:T72820

R-NT2RP3004070//ESTs//5.5e-108:552:95//Hs.23392:AI310139

R-NT2RP3004078//ESTs//3.3e-82:443:93//Hs.26407:W45387

R-NT2RP3004093//ESTs//4.4e-83:426:94//Hs.140932:AI262104

R-NT2RP3004095//ESTs//0.00013:93:78//Hs.36567:AA262045

R-NT2RP3004110//ESTs, Weakly similar to similar to oxysterol-binding pro

teins: partial CDS [C.elegans] //3.5e-76:402:95//Hs.55847:W31092

R-NT2RP3004125//ESTs//9.3e-74:363:97//Hs.32988:C01696

R-NT2RP3004145//ESTs//2.6e-96:451:99//Hs.59584:AA587334

R-NT2RP3004148//ESTs//1.3e-10:77:92//Hs.135890:AI183425

R-NT2RP3004155//ESTs//1.7e-110:558:96//Hs.27003:AI279093

R-NT2RP3004206//ESTs, Moderately similar to CROOKED NECK PROTEIN [Droso

phila melanogaster]//1.8e-40:200:100//Hs.26089:AA195126

R-NT2RP3004207//ESTs, Weakly similar to gene SEZ-6 [M.musculus] //1.1e-41

:266:89//Hs.6314:AA522619

R-NT2RP3004209//ESTs, Highly similar to PUTATIVE UBIQUITIN CARBOXYL-TER

MINAL HYDROLASE C13A11.04C [Schizosaccharomyces pombe] //3.7e-112:547:97/

/Hs.99819:AI346680

R-NT2RP3004215//ESTs//1.1e-103:541:95//Hs.124918:N64794

R-NT2RP3004242//ESTs//4.5e-105:524:96//Hs.29724:N46252

R-NT2RP3004246//EST//1.9e-07:67:91//Hs.125687:AA884827

R-NT2RP3004253//EST//2.9e-88:454:94//Hs.127713:AA961628

R-NT2RP3004258//ESTs, Weakly similar to PRE-MRNA SPLICING FACTOR SRP75 [

Homo sapiens]//1.6e-89:468:95//Hs.5117:AA831530

R-NT2RP3004262//ESTs//4.1e-86:443:96//Hs.101393:T87623

R-NT2RP3004334//EST//0.00057:206:63//Hs.149388:AI273630

R-NT2RP3004341//EST//0.00042:151:68//Hs.148498:AI200264

R-NT2RP3004348//Homo sapiens LIM protein mRNA, complete cds//5.9e-61:299

:85//Hs.154103:AF061258

R-NT2RP3004349//EST//3.6e-42:175:88//Hs.161917:AA483223

R-NT2RP3004378//ESTs//0.27:294:60//Hs.66479:AA863044

R-NT2RP3004399//ESTs//5.8e-99:479:98//Hs.120234:AA732224

R-NT2RP3004424//EST, Highly similar to F21G4.6 [C.elegans] //0.30:253:58/

/Hs.97184:AA385934

R-NT2RP3004428//ESTs//2.8e-48:279:91//Hs.106826:W25985

R-NT2RP3004451//ESTs//4.8e-101:509:96//Hs.29725:W74621

R-NT2RP3004454//Homo sapiens mRNA for KIAA0448 protein, complete cds//9.

3e-108:526:98//Hs.27349:AB007917

R-NT2RP3004466//ESTs//0.25:51:90//Hs.7778:AA195616

R-NT2RP3004470//EST//0.032:70:71//Hs.147925:AI249332

R-NT2RP3004472//ESTs//0.0069:430:59//Hs.116651:AA993406

R-NT2RP3004475//Homo sapiens mRNA for KIAA0456 protein, partial cds//5.0

e-107:521:97//Hs.5003:AB007925

R-NT2RP3004480

R-NT2RP3004490//ESTs//4.7e-68:354:95//Hs.163721:H42504

R-NT2RP3004498//ESTs, Moderately similar to ORF2: function unknown [H.sa

piens]//3.4e-100:508:95//Hs.47393:AA218858

R-NT2RP3004503//ESTs//4.6e-90:478:93//Hs.133998:AA994735

R-NT2RP3004504//ESTs, Highly similar to cytoplasmic polyadenylation elem

ent-binding protein [M.musculus]//1.8e-83:465:92//Hs.137064:AA318257

R-NT2RP3004507//ESTs//1.5e-98:495:96//Hs.128905:AI051971

R-NT2RP3004527//EST//1.6e-109:535:97//Hs.149481:AI279865

R-NT2RP3004534

R-NT2RP3004544//EST//0.035:226:60//Hs.99195:AA449232

R-NT2RP3004566//ESTs//4.1e-86:455:95//Hs.13110:T67461

R-NT2RP3004569//ESTs//2.9e-94:493:94//Hs.24948:AA977674

R-NT2RP3004572//ESTs//1.1e-92:437:99//Hs.24846:AI420493

R-NT2RP3004578//ESTs//0.98:166:64//Hs.124593:AA854456

R-NT2RP3004594//EST//5.8e-89:426:98//Hs.134213:AI080213

R-NT2RP3004617//ESTs//1.4e-40:226:85//Hs.15921:R71157

R-NT2RP3004618//ESTs//1.8e-38:229:90//Hs.125153:AA453723

R-NT2RP3004670//Homo sapiens GN6ST mRNA for long form of N-acetylglucosa mine-6-0-sulfotransferase (GlcNAc6ST), complete cds//7.2e-57:291:95//Hs.

8786: AB014680

R-NT2RP4000008//ESTs//8.9e-119:561:98//Hs.25035:AI123335

R-NT2RP4000023//EST//1.2e-34:271:80//Hs.98300:AA418560

R-NT2RP4000035//Small inducible cytokine A5 (RANTES)//2.1e-68:320:82//Hs .155464:AF088219

R-NT2RP4000049//Homo sapiens TRAIL receptor 2 mRNA, complete cds//6.7e-6 0:289:82//Hs.51233:AF016266

R-NT2RP4000051//ESTs, Weakly similar to protein B [H.sapiens] //8.3e-98:4 62:99//Hs.10114:AI345945

R-NT2RP4000078//ESTs//0.00068:367:60//Hs.106090:AA457030

R-NT2RP4000102//ESTs//9.7e-50:256:97//Hs.24266:R28287

R-NT2RP4000109//Homo sapiens mRNA for MEGF5, partial cds//1.1e-107:536:9 6//Hs.57929:AB011538

R-NT2RP4000129//Homo sapiens mRNA for KIAA0483 protein, partial cds//3.5 e-112:554:97//Hs.64691:AB007952

R-NT2RP4000147//ESTs//3.9e-11:122:80//Hs.25584:AA632014

R-NT2RP4000150//EST//4.4e-84:510:88//Hs.144238:W52294

R-NT2RP4000151//ESTs, Weakly similar to HYPOTHETICAL 31.0 KD PROTEIN R10

7.2 IN CHROMOSOME III [C.elegans] //5.7e-93:515:92//Hs.8083:AA521436

R-NT2RP4000159//ESTs//0.0019:209:65//Hs.161816:AA400295

R-NT2RP4000167//ESTs//2.1e-113:549:97//Hs.109441:N66569

R-NT2RP4000185//ESTs//0.65:232:59//Hs.144445:AA807257

## 特平11-248036

R-NT2RP4000210//Homo sapiens mRNA for KIAA0700 protein, partial cds//1.5 e-100:505:96//Hs.13999:AB014600

R-NT2RP4000212//ESTs//8.5e-14:169:75//Hs.8520:AA081788

R-NT2RP4000214//Human mRNA for KIAA0392 gene, partial cds//6.2e-43:272:9

0//Hs.40100:AB002390

R-NT2RP4000218//ESTs//6.1e-10:335:64//Hs.105658:AA978185

R-NT2RP4000243//Homo sapiens mRNA for cartilage-associated protein (CASP )//2.9e-70:354:96//Hs.155481:AJ006470

R-NT2RP4000246//ESTs//7.1e-26:154:94//Hs.14838:AA502757

R-NT2RP4000259//Homo sapiens clone 683 unknown mRNA, complete sequence//

9.3e-79:379:99//Hs.43728:AF091092

R-NT2RP4000263

R-NT2RP4000290//ESTs, Weakly similar to similar to Achlya ambisexualis a ntheridiol steroid receptor [C.elegans]//4.7e-104:525:96//Hs.152069;AA54 8972

R-NT2RP4000312//ESTs//8.2e-66:319:99//Hs.35091:AI271631

R-NT2RP4000321//Homo sapiens clone 24453 mRNA sequence//1.3e=109:513:99/ /Hs.13410:AF070524

R-NT2RP4000323//ESTs//7.7e-109:534:97//Hs.34790:AA192760

R-NT2RP4000355//ESTs//3.1e-44:320:83//Hs.141323:N80390

R-NT2RP4000360//Homo sapiens mRNA for KIAA0738 protein, complete cds//7.

6e-111:520:99//Hs.107479:AB018281

R-NT2RP4000367//Homo sapiens IkappaB kinase complex associated protein (

IKAP) mRNA, complete cds//2.8e-110:527:98//Hs.31323:AF044195

R-NT2RP4000370//ESTs//8.9e-32:166:98//Hs.70488:AI301130

R-NT2RP4000376//ESTs//6.8e-99:465:99//Hs.27182:AA604498

R-NT2RP4000381//ESTs//3.0e-50:280:93//Hs.8395:W27376

 $R-NT2RP4000415//ESTs, \ Weakly \ similar \ to \ coded \ for \ by \ C. \ elegans \ cDNA \ yk3$ 

0b3.5 [C.elegans] //3.9e-87:499:91//Hs.26156:AA630975

R-NT2RP4000417//ESTs, Moderately similar to HYPOTHETICAL 91.2 KD PROTEI

N IN RPS7A-SCH9 INTERGENIC REGION [Saccharomyces cerevisiae] //8.9e-95:46

8:96//Hs.93871:AI191318

R-NT2RP4000424//ESTs//3.7e-98:473:98//Hs.24945:AI189011

R-NT2RP4000448//ESTs//2.6e-79:446:91//Hs.25159:R60955

R-NT2RP4000449//ESTs//3.6e-98:468:98//Hs.31176:AI037953

R-NT2RP4000455//Homo sapiens N-methyl-D-aspartate receptor 2D subunit pr

ecursor (NMDAR2D) mRNA, complete cds//0.35:153:63//Hs.113286:U77783

R-NT2RP4000457//ESTs//4.5e-89:455:96//Hs.62638:AA127740

R-NT2RP4000480//ESTs//4.9e-92:431:99//Hs.121072:AI204167

R-NT2RP4000481

R-NT2RP4000500//ESTs, Weakly similar to HYPOTHETICAL 83.6 KD PROTEIN R05

D3.2 IN CHROMOSOME III [C.elegans] //1.2e-40:125:97//Hs.56124:AI424792

R-NT2RP4000515//EST//6.7e-30:183:90//Hs.150710:AI122713

R-NT2RP4000517//Aldehyde dehydrogenase 7//7.5e-28:183:76//Hs.83155:U1086

8

R-NT2RP4000518//EST//0.091:178:58//Hs.133031:AI049874

R-NT2RP4000519

R-NT2RP4000524//ESTs, Highly similar to rsec8 [R.norvegicus]//3.4e-93:49

6:93//Hs.107394:H07126

R-NT2RP4000528//EST//0.84:130:66//Hs.140208:AA702213

R-NT2RP4000541//EST//5.2e-63:337:94//Hs.156337:AI337328

R-NT2RP4000556//ESTs, Highly similar to 60S RIBOSOMAL PROTEIN L11 [R.nor

vegicus] //8.2e-92:448:98//Hs.25597:H93026

R-NT2RP4000588//ESTs//3.8e-94:445:98//Hs.44077:N28840

R-NT2RP4000614//ESTs//6.5e-18:159:83//Hs.24549:N57263

R-NT2RP4000638//ESTs//2.5e-46:296:87//Hs.132722:AA618531

R-NT2RP4000648//ESTs//2.6e-103:559:93//Hs.23794:W80393

R-NT2RP4000657//ESTs//1.0:189:60//Hs.87073:AA972704

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R-NT2RP4000704//ESTs//2.8e-101:509:96//Hs.84824:AA935651
R-NT2RP4000724//ESTs//1.5e-83:442:94//Hs.142114:AA205615
R-NT2RP4000728//ESTs//0.84:61:75//Hs.145334:AI251399
R-NT2RP4000739//ESTs//8.8e-80:418:94//Hs.42959:N21211
R-NT2RP4000781//ESTs//1.4e-79:376:99//Hs.135458:AI081312
R-NT2RP4000817//Homo sapiens mRNA for KIAA0470 protein, complete cds//3.
1e-106:550:94//Hs.25132:AB007939
R-NT2RP4000833//ESTs//5.8e-46:309:85//Hs.163979:AA828834
R-NT2RP4000837//ESTs//1.7e-112:539:97//Hs.97718:AI334028
R-NT2RP4000855//ESTs//1.1e-95:486:95//Hs.5345:AA988104
R-NT2RP4000865//EST//6.2e-68:412:89//Hs.142196:AA258356
R-NT2RP4000878//ESTs//1.9e-80:417:95//Hs.104716:AI023185
R-NT2RP4000879//ESTs//1.8e-42:211:99//Hs.89991:AI374617
R-NT2RP4000907//ESTs//1.2e-89:453:97//Hs.100182:N92594
R-NT2RP4000915//EST//9.4e-06:197:63//Hs.145970:AI277106
R-NT2RP4000925//ESTs, Weakly similar to KIAA0405 [H.sapiens]//5.9e-17:13
4:85//Hs.14146:W92235
R-NT2RP4000927//ESTs//4.3e-14:84:100//Hs.155360:AA984683
R-NT2RP4000928//Homo sapiens CDP-diacylglycerol synthase 2 (CDS2) mRNA.
partial cds//8.2e-108:548:95//Hs.24812:AF069532
R-NT2RP4000929//ESTs//1.3e-119:567:98//Hs.62717:AA044905
R-NT2RP4000955//ESTs//3.5e-10:119:78//Hs.42946:N21111
R-NT2RP4000973//ESTs//2.8e-05:93:69//Hs.155126:AA563986
R-NT2RP4000975//ESTs//4.4e-58:324:95//Hs.126070:AA045179
R-NT2RP4000979//ESTs//3.5e-42:468:73//Hs.106210:AI193017
R-NT2RP4000984//Homo sapiens clone 23770 mRNA sequence//8.7e-120:570:98/
/Hs.12457:AF052123
R-NT2RP4000989//ESTs//1.3e-122:581:98//Hs.10499:AA528018
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R-NT2RP4000996//ESTs//9.2e-113:579:94//Hs.23762:N26620

R-NT2RP4000997//Homo sapiens neuronal thread protein AD7c-NTP mRNA, comp

lete cds//1.1e-28:439:68//Hs.129735:AF010144

R-NT2RP4001004//ESTs//3.6e-78:389:98//Hs.156290:AI016769

R-NT2RP4001006//ESTs, Moderately similar to ORF2: function unknown [H.sa

piens]//6.6e-124:574:99//Hs.47393:AA218858

R-NT2RP4001010//EST//2.8e-31:194:90//Hs.161186:AI418635

R-NT2RP4001029//ESTs//4.4e-111:523:99//Hs.28423:AI336292

R-NT2RP4001041//ESTs, Highly similar to LEUCYL-TRNA SYNTHETASE, CYTOPLA

SMIC [Saccharomyces cerevisiae] //3.6e-114:569:96//Hs.6762:AA088424

R-NT2RP4001057//Homo sapiens KIAA0399 mRNA, partial cds//2.0e-51:282:94/

/Hs.100955:AB007859

R-NT2RP4001064//ESTs, Weakly similar to protein B [H.sapiens] //2.1e-103:

485:99//Hs.10114:AI345945

R-NT2RP4001078

R-NT2RP4001079//Homo sapiens mRNA for putative Ca2+-transporting ATPase, partial//1.7e-119:569:98//Hs.106778:AJ010953

R-NT2RP4001080//ESTs//7.6e-10:65:100//Hs.131694:AA927668

R-NT2RP4001086//Homo sapiens mRNA for KIAA0592 protein, partial cds//5.9

e-121:548:95//Hs.13273:AB011164

R-NT2RP4001095//ESTs//1.5e-113:563:96//Hs.118732:AI344055

R-NT2RP4001100//ESTs//2.0e-46:413:79//Hs.146314:R99617

R-NT2RP4001117//EST//7.4e-51:294:92//Hs.7260:T23737

R-NT2RP4001122//ESTs//5.4e-109:509:99//Hs.16390:AI052357

R-NT2RP4001126//EST//0.97:169:61//Hs.148107:AA693476

R-NT2RP4001138//ESTs//3.0e-110:543:97//Hs.57655:AI056890

R-NT2RP4001143//ESTs, Highly similar to HYPOTHETICAL 52.9 KD PROTEIN IN

SAP155-YMR31 INTERGENIC REGION [Saccharomyces cerevisiae] //5.4e-113:573

:96//Hs.5249:U55977

R-NT2RP4001148//ESTs//3.1e-103:490:98//Hs.121282:AI091453

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R-NT2RP4001149//EST//1.7e-50:281:93//Hs.101727:H16171
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R-NT2RP4001150//ESTs//1.9e-90:422:100//Hs.125490:AI138884

R-NT2RP4001159

R-NT2RP4001174//ESTs//2.5e-110:526:98//Hs.116555:AA639278

R-NT2RP4001206//ESTs//1.1e-25:140:97//Hs.83756:AI002822

R-NT2RP4001207//ESTs//4.4e-70:432:89//Hs.13109:AA192514

R-NT2RP4001210//ESTs//1.4e-108:509:99//Hs.27021:AI359495

R-NT2RP4001213//ESTs, Highly similar to ZINC FINGER PROTEIN 8 [Homo sap

iens]//4.4e-123:624:95//Hs.22744:AI379892

R-NT2RP4001219//ESTs//0.0043:142:65//Hs.6733:AI160750

R-NT2RP4001228//ESTs//4.9e-101:482:98//Hs.62684:AA806103

R-NT2RP4001235//ESTs//3.7e-105:571:93//Hs.37706:AA005120

R-NT2RP4001256//ESTs//1.1e-12:189:74//Hs.20621:W28255

R-NT2RP4001260//EST//6.9e-05:313:61//Hs.116438:AA648430

R-NT2RP4001274//EST//0.0020:246:63//Hs.149955:AI289933

R-NT2RP4001276//ESTs//2.9e-34:213:91//Hs.43100:AA186588

R-NT2RP4001313

R-NT2RP4001315//EST//6.1e-38:217:93//Hs.97832:AA400892

R-NT2RP4001339//ESTs//3.8e-91:430:99//Hs.34840:AI279612

R-NT2RP4001345//ESTs//5.3e-89:443:96//Hs.6770:AA972732

R-NT2RP4001351//ESTs//6.0e-78:394:97//Hs.102796:N70837

R-NT2RP4001353//ESTs//4.8e-06:90:82//Hs.7778:AA195616

R-NT2RP4001372

R-NT2RP4001373//ESTs, Weakly similar to HYPOTHETICAL 48.8 KD PROTEIN IN

TRK2-MRS4 INTERGENIC REGION [Saccharomyces cerevisiae] //1.7e-108:546:96/

/Hs.32271:AA203680

R-NT2RP4001375//ESTs//2.4e-19:155:87//Hs.62119:AA043299

R-NT2RP4001379//EST//4.4e-29:288:72//Hs.157848:AI362501

R-NT2RP4001389//ESTs, Highly similar to HYPOTHETICAL 51.6 KD PROTEIN IN

PAP1-MRPL13 INTERGENIC REGION [Saccharomyces cerevisiae] //3.8e-79:438:9

3//Hs.21938:W81045

R-NT2RP4001407//ESTs//8.3e-112:541:97//Hs.22587:AA743132

R-NT2RP4001414//ESTs//8.6e-18:117:90//Hs.90789:W27649

R-NT2RP4001433//ESTs, Moderately similar to PROHIBITIN [H.sapiens] //1.6e

-102:498:97//Hs.62386:AA512948

R-NT2RP4001442//ESTs//8.8e-104:489:99//Hs.101619:AI339433

R-NT2RP4001447

R-NT2RP4001474

R-NT2RP4001483//ESTs//2.1e-100:528:92//Hs.17860:AA706655

R-NT2RP4001498//ESTs//1.1e-97:470:98//Hs.95744:AI392846

R-NT2RP4001502//ESTs//6.7e-73:382:96//Hs.11874:N93511

R-NT2RP4001507//ESTs//2.6e-57:302:96//Hs.65328:AA625385

R-NT2RP4001524//ESTs, Weakly similar to F13B12.1 [C.elegans] //2.9e-107:5

46:96//Hs.5570:AI377863

R-NT2RP4001529//ESTs//3.3e-112:524:99//Hs.28423:AI336292

R-NT2RP4001547//ESTs, Weakly similar to NADH-UBIQUINONE OXIDOREDUCTASE C

HAIN 5 [Paramecium tetraurelia] //2.8e-120:566:98//Hs.108530:AA523928

R-NT2RP4001551//ESTs, Weakly similar to CELL DIVISION CONTROL PROTEIN 68

[S.cerevisiae] //1.4e-26:184:88//Hs.136189:AA133224

R-NT2RP4001555//ESTs//1.1e-95:445:100//Hs.134403:AA677552

R-NT2RP4001567//ESTs//2.8e-106:506:98//Hs.102708:AA292285

R-NT2RP4001568//ESTs//6.4e-55:300:94//Hs.57442:N63437

R-NT2RP4001571//ESTs//1.3e-114:556:97//Hs.30340:AA521251

R-NT2RP4001574//ESTs//0.0035:120:67//Hs.96339:AA225906

R-NT2RP4001575

R-NT2RP4001592//ESTs, Weakly similar to ISOLEUCYL-TRNA SYNTHETASE, MITOC

HONDRIAL [S.cerevisiae] //8.7e-112:557:97//Hs.7558:AA526812

R-NT2RP4001610//ESTs//6.2e-77:382:96//Hs.21543:AA166776

R-NT2RP4001614//ESTs//2.8e-117:565:98//Hs.9591:AA069657

R-NT2RP4001634//ESTs//2.0e-39:213:96//Hs.32360:AA534737

R-NT2RP4001638//Homo sapiens clone 23967 unknown mRNA, partial cds//1.7e

-116:559:97//Hs.5332:AF007151

R-NT2RP4001644//ESTs, Moderately similar to MNK1 [H.sapiens]//5.3e-36:19

2:97//Hs.5662:AA868361

R-NT2RP4001656//ESTs, Highly similar to HYPOTHETICAL 108.5 KD PROTEIN R

06F6.2 IN CHROMOSOME II [Caenorhabditis elegans] //1.1e-104:525:96//Hs.20

472:W28734

R-NT2RP4001677//ESTs//1.8e-106:522:97//Hs.106390:AA156805

R-NT2RP4001696//Human chromosome 8 BAC clone CIT987SK-2A8 complete seque

nce//5.7e-118:583:96//Hs.15562:U96629

R-NT2RP4001725//ESTs//2.0e-11:141:74//Hs.117589:N25941

R-NT2RP4001730//ESTs, Weakly similar to UDP-GLUCOSE:GLYCOPROTEIN GLUCOSY

LTRANSFERASE PRECURSOR [D.melanogaster] //3.4e-73:362:97//Hs.152332:AI141

922

R-NT2RP4001739//ESTs//6.6e-59:340:91//Hs.122293:AA843692

R-NT2RP4001753//Zinc finger protein 3 (A8-51)//5.6e-113:552:96//Hs.2481:

X78926

R-NT2RP4001760//ESTs//2.5e-94:453:98//Hs.122579:AA766315

R-NT2RP4001790//ESTs, Weakly similar to ZINC FINGER PROTEIN 84 [H.sapien

s]//2.0e-62:326:94//Hs.110839:W28098

R-NT2RP4001803

R-NT2RP4001822//ESTs//4.4e-98:526:92//Hs.96908:AI161133

R-NT2RP4001823//ESTs//1.7e-72:357:97//Hs.144900:AI218434

R-NT2RP4001828//ESTs//3.3e-101:536:92//Hs.18851:AA857826

R-NT2RP4001838//ESTs//4.2e-58:344:90//Hs.48723:N66663

R-NT2RP4001849//EST//0.24:105:71//Hs.136747:AA749210

R-NT2RP4001889//Human mRNA for KIAA0118 gene, partial cds//3.4e-34:212:8

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8//Hs.154326:D42087
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R-NT2RP4001893//ESTs//3.0e-58:321:95//Hs.158787:W79602

R-NT2RP4001896//EST//3.8e-15:108:92//Hs.160835:AI345528

R-NT2RP4001901//ESTs//1.2e-110:536:97//Hs.31443:AI018606

R-NT2RP4001927//ESTs//2.1e-105:546:93//Hs.73291:AI417099

R-NT2RP4001938//ESTs//2.8e-40:235:78//Hs.163641:R61848

R-NT2RP4001946//ESTs//1.3e-29:175:93//Hs.43703:AA088436

R-NT2RP4001950//ESTs//4.6e-95:458:98//Hs.150890:AI341793

R-NT2RP4001953//Clathrin, light polypeptide (Lcb)//2.3e-62:310:82//Hs.73

919:X81637

R-NT2RP4001966//ESTs, Weakly similar to tenascin-like protein [D.melanog

aster] //8.3e-87:457:94//Hs.41793:AA775879

R-NT2RP4001975//ESTs//1.9e-52:281:94//Hs.7704:W58252

R-NT2RP4002018

R-NT2RP4002047//ESTs, Highly similar to GTP-BINDING PROTEIN LEPA [Pseud

omonas fluorescens]//4.7e-09:90:86//Hs.41127:AA555184

R-NT2RP4002052//ESTs//0.054:353:60//Hs.117510:AA903738

R-NT2RP4002058//EST//7.8e-26:151:94//Hs.124617:AA855106

R-NT2RP4002071//ESTs//6.9e-99:475:98//Hs.29216:AA916679

R-NT2RP4002075//ESTs//0.67:121:65//Hs.153939:AI284198

R-NT2RP4002078//ESTs, Highly similar to ZINC FINGER PROTEIN 35 [Homo sa

piens]//1.6e-61:464:82//Hs.144228:N99507

R-NT2RP4002081//ESTs, Weakly similar to HYPOTHETICAL 13971 KD PROTEIN CO

8B11.3 IN CHROMOSOME II [C.elegans] //2.3e-56:271:100//Hs.6185:AA428565

R-NT2RP4002083//ESTs//2.0e-108:548:96//Hs.6120:W80407

R-NT2RP4002408//ESTs//2.6e-77:391:96//Hs.14014:AA745592

R-NT2RP4002791//ESTs//7.9e-101:527:93//Hs.22394:N32555

R-NT2RP4002888//ESTs, Highly similar to ENV POLYPROTEIN [Avian spleen n

ecrosis virus] //1.9e-65:373:92//Hs.31532:H18272

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R-NT2RP4002905//ESTs//1.5e-107:517:98//Hs.40460:N36090
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R-OVARC1000001//Homo sapiens mRNA for KIAA0465 protein, partial cds//2.8

e-115:605:94//Hs.108258:AB007934

R-OVARC1000004

R-OVARC1000006//ESTs//1.5e-19:139:89//Hs.143034:AI126929

R-OVARC1000013//ESTs//5.9e-98:531:93//Hs.16470:AA121635

R-OVARC1000014//ESTs//0.24:243:60//Hs.19569:AA464273

R-OVARC1000017

R-OVARC1000035//ESTs//0.035:252:63//Hs.134123:AI078286

R-OVARC1000058//H.sapiens mRNA for translin associated protein X//3.8e-4

6:331:83//Hs.96247:X95073

R-OVARC1000060//EST//2.8e-28:348:71//Hs.141728:W73041

R-OVARC1000068//ESTs//3.0e-83:491:90//Hs.29397:N51367

R-OVARC1000071//ESTs//2.5e-60:321:96//Hs.25010:R67871

R-OVARC1000085//Proteasome component C5//8.6e-67:366:92//Hs.75748:AL0312

59

R-OVARC1000087//ESTs//1.0e-111:526:98//Hs.129020:AI380703

R-OVARC1000091//ESTs, Weakly similar to HOST CELL FACTOR C1 [H.sapiens]/

/3.9e-112:596:94//Hs.20597:W58370

R-OVARC1000092//ESTs//5.1e-18:144:82//Hs.109140:AI289942

R-OVARC1000106

R-OVARC1000113//Homo sapiens okadaic acid-inducible phosphoprotein (0A48

-18) mRNA, complete cds//8.3e-102:495:97//Hs.3688:AF069250

R-OVARC1000114//H.sapiens mRNA for phosphoinositide 3-kinase//1.7e-45:48

9:74//Hs.101238:Y11312

R-OVARC1000133//EST//0.00028:284:61//Hs.30547:H05482

R-OVARC1000145//EST//3.9e-40:201:99//Hs.156148:AI333214

R-OVARC1000148//EST//0.79:150:62//Hs.100078:T05090

R-OVARC1000151

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R-OVARC1000168//EST//1.7e-19:142:90//Hs.38441:H66023
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R-OVARC1000191//EST//0.0072:292:63//Hs.132492:AA922629

R-OVARC1000198//Homo sapiens LIM protein mRNA, complete cds//6.1e-44:339

:81//Hs.154103:AF061258

R-OVARC1000209//ESTs, Moderately similar to ZINC FINGER PROTEIN 93 [H.sa

piens] //1.1e-32:196:92//Hs.64322:AA142864

R-OVARC1000212//EST//0.20:178:61//Hs.133031:AI049874

R-OVARC1000240//ESTs//9.0e-64:314:98//Hs.42300:AA204958

R-OVARC1000241//EST//0.00018:115:68//Hs.150728:AI123130

R-OVARC1000288//ESTs, Highly similar to HYPOTHETICAL 54.2 KD PROTEIN IN

CDC12-ORC6 INTERGENIC REGION [Saccharomyces cerevisiae] //3.3e-74:403:93

//Hs.108117:AI097079

R-OVARC1000302//EST//4.0e-14:102:90//Hs.136617:AA630476

R-OVARC1000304//ESTs, Highly similar to PUTATIVE GTP-BINDING PROTEIN MO

V10 [Mus musculus] //2.9e-37:191:98//Hs.20725:AI027777

R-OVARC1000309//ESTs//3.6e-66:348:94//Hs.9547:AA532449

R-OVARC1000321//ESTs//3.6e-87:454:95//Hs.110445:AA044743

R-OVARC1000326//ESTs, Moderately similar to lamina associated polypeptid

e 1C [R.norvegicus] //1.3e-98:488:96//Hs.125749:AI377682

R-OVARC1000335//ESTs//3.0e-115:565:97//Hs.54835:AI050863

R-OVARC1000347//EST//0.0018:145:65//Hs.136945:AA765672

R-OVARC1000384//ESTs//2.8e-38:253:89//Hs.15093:AA203423

R-OVARC1000408//ESTs//2.6e-98:515:94//Hs.119808:C05928

R-OVARC1000411//ESTs//3.2e-82:395:98//Hs.104747:AA406219

R-OVARC1000414//Landsteiner-Wiener blood group glycoprotein//1.5e-27:211

:79//Hs.108287:L27670

R-OVARC1000420//EST//2.8e-38:255:74//Hs.138525:R99237

R-OVARC1000427//EST//2.6e-58:302:96//Hs.122914:AA767034

R-OVARC1000431//ESTs//4.9e-108:551:96//Hs.11668:AI123426

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R-OVARC1000437
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R-OVARC1000440//ESTs//2.9e-91:456:96//Hs.93701:AI018671

R-OVARC1000442//Human high-affinity copper uptake protein (hCTR1) mRNA,

complete cds//4.3e-45:320:84//Hs.73614:U83460

R-OVARC1000443//Homo sapiens mRNA for KIAA0683 protein, complete cds//3.

6e-79:418:94//Hs.12334:AB014583

R-OVARC1000461//ESTs//3.1e-62:342:93//Hs.23241:R46582

R-OVARC1000465//ESTs//1.7e-67:349:95//Hs.127238:AA477576

R-OVARC1000466//ESTs//1.9e-66:337:95//Hs.5212:AI421211

R-OVARC1000473//ESTs//5.4e-89:320:99//Hs.29173:AA134926

R-OVARC1000479//ESTs, Highly similar to TIP120 [R.norvegicus] //1.1e-102:

514:96//Hs.11833:AI299947

R-OVARC1000486//ESTs//3.9e-78:405:95//Hs.98312:AA424983

R-OVARC1000496

R-OVARC1000520//ESTs//1.2e-20:145:88//Hs.87456:AA434484

R-OVARC1000526//Small inducible cytokine A5 (RANTES)//8.9e-47:217:87//Hs

.155464:AF088219

R-OVARC1000533//ESTs, Moderately similar to integrase [H.sapiens] //8.5e-

48:264:92//Hs.49860:AA702248

R-OVARC1000543//ESTs//5.7e-74:410:94//Hs.62817:AA047021

R-OVARC1000556//H.sapiens mRNA for ribosomal S6 kinase//9.5e-27:202:85//

Hs.90859:X85106

R-OVARC1000557//EST//2.8e-18:169:79//Hs.149101:AI244285

R-OVARC1000564//EST//2.3e-34:199:92//Hs.146637:AI141587

R-OVARC1000573//Interleukin 10//4.7e-42:300:83//Hs.2180:M57627

R-OVARC1000578//Small inducible cytokine A5 (RANTES)//5.2e-58:392:84//Hs

.155464:AF088219

R-OVARC1000588//EST//1.8e-41:174:85//Hs.163333:AA879053

R-OVARC1000605

R-OVARC1000622//Homo sapiens mRNA, chromosome 1 specific transcript KIAA 0501//6.4e-47:417:77//Hs.159897:AB007970

R-OVARC1000640//H.sapiens mRNA for translin associated protein X//1.9e-2 8:366:72//Hs.96247:X95073

R-OVARC1000661//Homo sapiens mRNA for KIAA0590 protein, complete cds//5.

1e-31:162:100//Hs.111862:AB011162

R-OVARC1000678//EST//0.92:199:60//Hs.122025:AA778480

R-OVARC1000679//ESTs//0.94:416:59//Hs.130754:AA279522

R-OVARC1000681//EST//9.2e-21:179:80//Hs.132635:AI032875

R-OVARC1000689//Homo sapiens ataxin-7 (SCA7) mRNA, complete cds//0.053:1

60:64//Hs.108447:AJ000517

R-OVARC1000700//Homo sapiens KIAA0441 mRNA, complete cds//7.1e-09:141:73 //Hs.32511:AB007901

R-OVARC1000703//ESTs//1.7e-46:298:87//Hs.138856:H47461

R-OVARC1000730//ESTs, Weakly similar to C27F2.7 gene product [C.elegans]

//1.7e-17:137:86//Hs.7049:AI141736

R-OVARC1000746//ESTs//0.16:366:60//Hs.136969:AA830918

R-OVARC1000769//ESTs, Weakly similar to eukaryotic initiation factor eIF

-2 alpha kinase [D.melanogaster] //4.6e-28:430:69//Hs.42457:AA523306

R-OVARC1000771//ESTs//1.3e-87:461:94//Hs.22399:AA531016

R-OVARC1000781//ESTs//8.3e-119:572:97//Hs.41972:AA626793

R-OVARC1000787//ESTs//7.4e-18:115:93//Hs.164036:AA845659

R-OVARC1000800//MITOCHONDRIAL STRESS-70 PROTEIN PRECURSOR//4.9e-19:119:9

5//Hs.3069:L11066

R-OVARC1000802//ESTs//2.2e-41:383:78//Hs.161228:AI419764

R-OVARC1000834//Homo sapiens mRNA for atopy related autoantigen CALC//1.

2e-106:536:95//Hs.61628:Y17711

R-OVARC1000846//Clathrin, light polypeptide (Lcb)//1.6e-66:282:87//Hs.73

919: X81637

R-OVARC1000850//Homo sapiens PB39 mRNA, complete cds//1.2e-115:579:96//H s.18910:AF045584

R-OVARC1000862//EST//4.3e-14:129:81//Hs.150663:AA923096

R-OVARC1000876//ESTs//1.0e-115:573:96//Hs.87287:AI150674

R-OVARC1000883//ESTs//3.5e-109:523:98//Hs.28423:AI336292

R-OVARC1000885//ESTs, Highly similar to HYPOTHETICAL OXIDOREDUCTASE IN

ROCC-PTA INTERGENIC REGION [Bacillus subtilis] //7.9e-98:525:93//Hs.10366:W21953

R-OVARC1000886//ESTs//8.2e-79:417:94//Hs.7729:AA830777

R-OVARC1000891//ESTs//6.8e-75:401:94//Hs.5833:H15401

R-OVARC1000897//ESTs//3.5e-91:440:98//Hs.125264:AA873350

R-OVARC1000912

R-OVARC1000915//ESTs//1.0e-45:328:82//Hs.163980:AA715814

R-OVARC1000924//ESTs//1.0e-100:501:96//Hs.30204:AA497127

R-OVARC1000936//EST//3.0e-74:367:98//Hs.145098:AA421696

R-OVARC1000937//EST//1.1e-53:290:95//Hs.162846:AA631215

R-OVARC1000945//ESTs//4.9e-51:301:89//Hs.20100:W25794

R-OVARC1000948//ESTs//3.7e-67:332:98//Hs.112570:AA621971

R-OVARC1000959//Small inducible cytokine A5 (RANTES)//7.2e-44:283:86//Hs

.155464:AF088219

R-OVARC1000960//Homo sapiens KIAA0395 mRNA, partial cds//1.1e-41:348:80/

/Hs.43681:AL022394

R-OVARC1000971//EST//6.2e-05:126:70//Hs.160491:AI254909

R-OVARC1000984//ESTs, Weakly similar to No definition line found [C.eleg

ans]//3.5e-68:346:96//Hs.25544:AA532784

R-OVARC1000996//EST//0.12:92:71//Hs.117141:AA678811

R-OVARC1000999//Homo sapiens KIAA0414 mRNA, partial cds//1.5e-44:513:73/

/Hs.127649:AB007874

R-OVARC1001000//ESTs//1.8e-22:198:80//Hs.140608:N53448

R-OVARC1001004//Human kpni repeat mrna (cdna clone pcd-kpni-4), 3' end//

1.7e-28:181:77//Hs.139107:K00629

R-OVARC1001010//EST//2.1e-09:92:85//Hs.147893:AI223270

R-OVARC1001011//EST//2.4e-14:200:75//Hs.149290:AI248117

R-OVARC1001032//EST//2.7e-29:304:73//Hs.141733:W80630

R-OVARC1001034//Homo sapiens apoptotic protease activating factor 1 (Apa

f-1) mRNA, complete cds//2.1e-09:137:74//Hs.77579:AF013263

R-OVARC1001038//Homo sapiens TRIAD1 type I mRNA, complete cds//4.1e-101:

501:96//Hs.9899:AF099149

R-OVARC1001040//ESTs//2.9e-87:415:99//Hs.132812:AI032046

R-OVARC1001044//ESTs//1.1e-83:432:96//Hs.55043:N94384

R-OVARC1001051//60S RIBOSOMAL PROTEIN L41//1.2e-16:124:88//Hs.108124:Z12

962

R-OVARC1001055//ESTs//2.4e-23:238:76//Hs.141421:H99231

R-OVARC1001062//ESTs//3.4e-92:469:96//Hs.34658:N98652

R-OVARC1001068//Homo sapiens Era GTPase A protein (HERA-A) mRNA, partial cds//7.3e-97:463:98//Hs.3426:AF082657

R-OVARC1001072//ESTs//1.3e-34:227:89//Hs.126704:W95844

R-OVARC1001074

R-OVARC1001085//Human T-cell leukemia virus enhancer factor//1.0:94:69//

Hs.103126:U57029

R-OVARC1001092//Homo sapiens mRNA for JM5 protein, complete CDS (clone I

MAGE 53337, LLNLc110F1857Q7 (RZPD Berlin) and LLNLc110G0913Q7 (RZPD Berl

in))//1.4e-96:325:98//Hs.21753:AJ005897

R-OVARC1001113//Homo sapiens diaphanous 1 (HDIA1) mRNA, complete cds//3.

3e-75:386:95//Hs.26584:AF051782

R-OVARC1001117//Human G protein-coupled receptor (STRL22) mRNA, complete

cds//3.9e-37:283:84//Hs.46468:U45984

R-OVARC1001118//ESTs//5.3e-99:485:97//Hs.130815:AA936548

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R-OVARC1001129//ESTs//9.8e-66:351:95//Hs.18616:T99312
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R-OVARC1001161//ESTs, Moderately similar to !!!! ALU SUBFAMILY SX WARNIN

G ENTRY !!!! [H.sapiens] //2.2e-66:346:95//Hs.53263:AA173226

R-OVARC1001162//EST//1.5e-44:376:80//Hs.161917:AA483223

R-OVARC1001167//ESTs//4.7e-110:548:96//Hs.35254:AI133727

R-OVARC1001169//ESTs//0.22:152:68//Hs.149424:AI274200

R-OVARC1001170//Small inducible cytokine A5 (RANTES)//1.8e-42:305:84//Hs .155464:AF088219

R-OVARC1001173//EST//2.5e-35:182:84//Hs.161917:AA483223

R-OVARC1001180//Human macrophage-derived chemokine precursor (MDC) mRNA, complete cds//6.6e-64:247:80//Hs.97203:U83171

R-OVARC1001188//ESTs//4.1e-18:296:69//Hs.139197:AA228343

R-OVARC1001200//ESTs//2.0e-28:207:85//Hs.35121:AA877826

R-OVARC1001232//ESTs//3.2e-61:358:91//Hs.6449:W95025

R-OVARC1001240//ESTs//6.7e-45:316:85//Hs.121675:AA629668

R-OVARC1001243//ESTs//2.3e-86:409:99//Hs.163091:AA742361

R-OVARC1001261//ESTs//0.63:125:64//Hs.155743:AI344166

R-OVARC1001268//ESTs//8.1e-20:113:98//Hs.109477:AA477929

R-OVARC1001270//ESTs//1.5e-107:530:97//Hs.62905:AA460708

R-OVARC1001271//ESTs//4.5e-36:401:72//Hs.20190:AA525532

R-OVARC1001282//EST//4.0e-91:428:99//Hs.145599:AI263113

R-OVARC1001296//ESTs//2.6e-63:301:100//Hs.125753:AA740885

R-OVARC1001306//Homo sapiens mRNA for KIAA0518 protein, partial cds//3.8

e-70:334:100//Hs.23763:AB011090

R-OVARC1001329//Clathrin, light polypeptide (Lcb)//1.3e-68:304:83//Hs.73

919:X81637

R-OVARC1001330//Proline arginine-rich end leucine-rich repeat protein//1 .0:147:63//Hs.76494:U41344

R-OVARC1001339//Small inducible cytokine A5 (RANTES)//5.0e-48:452:76//Hs

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.155464:AF088219
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R-OVARC1001341//ESTs, Moderately similar to !!!! ALU SUBFAMILY SQ WARNIN

G ENTRY !!!! [H.sapiens] //6.9e-85:464:93//Hs.23651:AA650356

R-OVARC1001342//40S RIBOSOMAL PROTEIN S8//4.9e-110:568:95//Hs.118690:X67

247

R-OVARC1001344//EST//3.6e-44:341:81//Hs.162197:AA535216

R-OVARC1001357//TUMOR-ASSOCIATED ANTIGEN L6//9.8e-44:250:93//Hs.3337:M90

657

R-OVARC1001360//ESTs//5.2e-110:534:98//Hs.24743:AA843844

R-OVARC1001369//ESTs//1.7e-98:478:97//Hs.7729:AA830777

R-OVARC1001372//ESTs//2.6e-97:456:99//Hs.153648:AI341415

R-OVARC1001376//Homo sapiens mRNA for KIAA0575 protein, complete cds//1.

1e-53:344:72//Hs.153468:AB011147

R-OVARC1001381//ESTs//5.1e-19:200:66//Hs.114031:AA700958

R-OVARC1001391

R-OVARC1001399//ESTs//0.0039:48:95//Hs.117964:N20913

R-OVARC1001417//Homo sapiens EXLM1 mRNA, complete cds//3.2e-111:561:95//

Hs.21586: AB006651

R-OVARC1001419

R-OVARC1001425//EST//5.7e-20:395:66//Hs.159707:AI393136

R-OVARC1001436//ESTs//9.6e-90:427:99//Hs.6982:AA622427

R-OVARC1001442//ESTs//1.1e-66:317:100//Hs.18437:AI206345

R-OVARC1001453//ESTs//2.0e-20:163:84//Hs.133503:AA628592

R-OVARC1001476//EST//0.23:125:66//Hs.71444:AA131700

R-OVARC1001480//ESTs//3.1e-56:181:97//Hs.40109:AA928694

R-OVARC1001489//ESTs//1.0:297:58//Hs.86723:AA393089

R-OVARC1001496//Homo sapiens C-terminal binding protein 2 mRNA, complete

cds//3.0e-117:585:96//Hs.6534:AF016507

R-OVARC1001506//Small inducible cytokine A5 (RANTES)//1.8e-48:283:90//Hs

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.155464:AF088219
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R-OVARC1001525//EST//0.80:170:60//Hs.157398:AI364539

R-OVARC1001542//Homo sapiens hJTB mRNA, complete cds//1.6e-111:566:95//H

s.6396:AB016492

R-OVARC1001547//ESTs//5.7e-105:564:93//Hs.68835:AA088388

R-OVARC1001577//Homo sapiens SRp46 splicing factor retropseudogene mRNA/

/4.4e-20:150:89//Hs.155160:AF031166

R-OVARC1001600//Human mRNA for KIAA0118 gene, partial cds//8.6e-21:282:7

2//Hs.154326:D42087

R-OVARC1001610//ESTs//4.6e-108:555:95//Hs.44295:N32019

R-OVARC1001611//ESTs//0.0021:117:71//Hs.135568:AA972965

R-OVARC1001615//Homo sapiens KIAA0409 mRNA, partial cds//9.2e-19:114:78/

/Hs.5158:AB007869

R-OVARC1001668//ESTs//1.0:127:69//Hs.153290:AI022659

R-OVARC1001702//ESTs//4.8e-44:225:97//Hs.96855:AA346854

R-OVARC1001703//ESTs//2.3e-89:426:99//Hs.27099:W60080

R-OVARC1001711//ESTs//1.9e-57:251:99//Hs.9732:AA527784

R-OVARC1001726//ESTs, Highly similar to APICAL PROTEIN [Xenopus laevis]

//1.2e-27:236:81//Hs.15485:AA046954

R-OVARC1001731//Tropomyosin 4 (fibroblast)//7.9e-74:422:90//Hs.102824:X0

5276

R-OVARC1001745//Human mRNA for tryptophan hydroxylase (EC 1.14.16.4)//1.

7e-62:300:83//Hs.144563:AF057280

R-OVARC1001762//ESTs, Weakly similar to N-TERMINAL ACETYLTRANSFERASE 1 [

S.cerevisiae] //6.8e-100:540:92//Hs.117741:AA903456

R-OVARC1001766//Homo sapiens eukaryotic translation initiation factor eI

F3, p35 subunit mRNA, complete cds//1.1e-109:567:94//Hs.155377:U97670

R-OVARC1001767//Homo sapiens mRNA for KIAA0675 protein, complete cds//2.

0e-109:529:97//Hs.15869:AB014575

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R-OVARC1001768//ESTs//3.5e-59:327:94//Hs.107923:H66127
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R-OVARC1001791//ESTs//1.3e-111:565:96//Hs.6107:AA160604

R-OVARC1001795//ESTs//2.8e-97:526:93//Hs.72158:AA156978

R-OVARC1001802//Homo sapiens DEC-205 mRNA, complete cds//4.8e-36:276:81/

/Hs.153563:AF011333

R-OVARC1001805//ESTs//4.1e-78:375:98//Hs.126902:AI374688

R-OVARC1001812//EST//4.8e-45:349:80//Hs.162677:AA604831

R-OVARC1001813//Homo sapiens mRNA for KIAA0538 protein, partial cds//2.1

e-15:519:63//Hs.25639:AB011110

R-OVARC1001820//ESTs//9.5e-50:314:80//Hs.140491:W52705

R-OVARC1001828//ESTs//0.11:186:63//Hs.29055:AI374621

R-OVARC1001846//ESTs//0.34:134:66//Hs.152992:AI242160

R-OVARC1001861//ESTs//2.3e-19:120:92//Hs.42225:N31809

R-OVARC1001873//Homo sapiens clones 24718 and 24825 mRNA sequence//1.9e-

105:571:91//Hs.25300:AF070611

R-OVARC1001879//EST//1.3e-24:185:85//Hs.136617:AA630476

R-OVARC1001880//Homo sapiens mRNA for KIAA0575 protein, complete cds//2.

2e-49:302:90//Hs.153468:AB011147

R-OVARC1001883//ESTs//1.0e-51:295:93//Hs.164059:AA447310

R-OVARC1001900//Homo sapiens tumorous imaginal discs protein Tid56 homol

og (TID1) mRNA, complete cds//1.6e-87:346:90//Hs.6216:AF061749

R-OVARC1001901//ESTs//6.8e-24:132:98//Hs.130797:AA904435

R-OVARC1001911//ESTs//1.1e-88:491:92//Hs.32343:W73855

R-OVARC1001916//ESTs//7.9e-97:491:95//Hs.24989:H97842

R-OVARC1001928

R-OVARC1001942//ESTs, Weakly similar to N-TERMINAL ACETYLTRANSFERASE 1 [

S.cerevisiae] //2.5e-39:253:88//Hs.117741:AA903456

R-OVARC1001943//ESTs//9.3e-13:78:100//Hs.143680:W38637

R-OVARC1001949//ESTs, Highly similar to ZINC FINGER PROTEIN 8 [Homo sap

iens]//8.3e-96:498:94//Hs.22744:AI379892

R-OVARC1001950//EST//1.3e-35:236:81//Hs.132635:AI032875

R-OVARC1001987//ESTs//5.6e-94:514:92//Hs.21148:AI183729

R-OVARC1001989//ESTs//9.7e-46:228:99//Hs.127046:AA935887

R-OVARC1002044//ESTs//3.4e-45:303:85//Hs.132722:AA618531

R-OVARC1002050//Homo sapiens mRNA for KIAA0465 protein, partial cds//4.4

e-109:542:96//Hs.108258:AB007934

R-OVARC1002066//ESTs//8.5e-97:455:99//Hs.135477:AI088556

R-OVARC1002082//Homo sapiens mRNA for KIAA0772 protein, complete cds//8.

1e-47:340:82//Hs.15519:AB018315

R-OVARC1002107//ESTs//5.9e-103:498:98//Hs.157207:AA629860

R-OVARC1002127//ESTs//3.0e-87:419:98//Hs.127833:AI347130

R-OVARC1002138//ESTs, Weakly similar to HYPOTHETICAL 54.7 KD PROTEIN C07

A9.1 IN CHROMOSOME III [Caenorhabditis elegans] //1.7e-102:485:98//Hs.137

516:AA805691

R-OVARC1002143//ESTs//1.3e-79:428:92//Hs.158126:W26825

R-OVARC1002156//ESTs//1.6e-38:198:98//Hs.22957:AA478923

R-OVARC1002158//ESTs//7.3e-81:412:96//Hs.12211:AA908631

R-OVARC1002165//ESTs//1.8e-09:154:72//Hs.49354:AA424160

R-OVARC1002182//ESTs//4.3e-80:465:91//Hs.77067:AA040478

R-PLACE1000004//ESTs, Weakly similar to TEICHOIC ACID BIOSYNTHESIS PROTE

IN A [Bacillus subtilis] //7.5e-32:164:99//Hs.144194:AA706337

R-PLACE1000005//EST//0.37:212:60//Hs.127020:AA934920

R-PLACE1000007//Homo sapiens clone 24422 mRNA sequence//3.8e-16:100:97//

Hs.109268:AF070557

R-PLACE1000014//EST//9.6e-44:344:77//Hs.161917:AA483223

R-PLACE1000031//ESTs//2.2e-32:374:70//Hs.117969:H94870

R-PLACE1000040//ESTs//0.00017:316:59//Hs.23342:AI310440

R-PLACE1000048//Human Line-1 repeat mRNA with 2 open reading frames//4.8

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e-79:519:86//Hs.23094:M19503
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R-PLACE1000050//ESTs//9.7e-90:453:96//Hs.27410:N25612

R-PLACE1000061//Ribosomal protein L37a//5.5e-22:126:97//Hs.1946:L06499

R-PLACE1000066//ESTs, Weakly similar to coded for by C. elegans cDNA ykl

0c10.3 [C.elegans] //1.4e-61:331:94//Hs.30026:AI356771

R-PLACE1000078//ESTs//2.6e-30:212:85//Hs.89312:AA167659

R-PLACE1000081

R-PLACE1000094

R-PLACE1000133//ESTs//4.4e-87:448:94//Hs.93748:AA884505

R-PLACE1000142//ESTs, Weakly similar to enoyl-CoA hydratase [H.sapiens]/

/5.5e-103:538:94//Hs.9670:AA632135

R-PLACE1000184//Homo sapiens estrogen-related receptor gamma mRNA, compl

ete cds//4.1e-114:594:94//Hs.151017:AF058291

R-PLACE1000185//ESTs, Weakly similar to No definition line found [C.eleg

ans] //2.0e-19:114:95//Hs.7036:W22072

R-PLACE1000213//ESTs//9.4e-99:494:96//Hs.24398:AI262946

R-PLACE1000214//ESTs//5.3e-98:466:98//Hs.28661:AA805916

R-PLACE1000236//Human BENE mRNA, partial cds//1.7e-19:162:84//Hs.85889:U

17077

R-PLACE1000246//EST//0.026:134:66//Hs.135611:Z21545

R-PLACE1000292//ESTs//2.5e-80:418:96//Hs.138233:N57912

R-PLACE1000332//EST//1.7e-82:422:96//Hs.118637:T61940

R-PLACE1000347//ESTs//8.5e-36:180:100//Hs.6377:AA632424

R-PLACE1000374//ESTs//2.8e-90:434:98//Hs.161785:AI423126

R-PLACE1000380//ESTs//1.0e-81:399:97//Hs.47105:AI334994

R-PLACE1000383//ESTs//3.7e-75:405:94//Hs.23200:AA203708

R-PLACE1000401//ESTs//1.4e-16:212:72//Hs.151665:AA020959

R-PLACE1000406//ESTs//2.1e-51:259:97//Hs.129651:N53089

R-PLACE1000420//ESTs//7.7e-92:471:95//Hs.144407:AA737799

R-PLACE1000421//ESTs//2.9e-14:282:67//Hs.142068:AA176125

R-PLACE1000424//EST//2.9e-35:453:70//Hs.162404:AA573131

R-PLACE1000435//Homo sapiens protein phosphatase with EF-hands-2 long fo

rm (PPEF-2) mRNA, complete cds//1.6e-47:472:77//Hs.113259:AF023456

R-PLACE1000444//ESTs, Moderately similar to platelet glycoprotein IIb pr

ecursor [H.sapiens] //2.0e-58:410:81//Hs.97579:AA398118

R-PLACE1000453//ESTs//2.3e-85:442:95//Hs.9725:AA039793

R-PLACE1000481//ESTs, Weakly similar to Ndr protein kinase [H.sapiens]//

3.2e-109:549:95//Hs.19074:U69566

R-PLACE1000492//ESTs, Highly similar to vacuolar protein sorting homolog

r-vps33b [R.norvegicus] //3.5e-83:435:94//Hs.26510:AA700425

R-PLACE1000540//ESTs//3.2e-58:281:99//Hs.118270:AA844729

R-PLACE1000547//Homo sapiens mRNA for KIAA0640 protein, partial cds//2.2

e-32:208:88//Hs.153026:AB014540

R-PLACE1000562//ESTs, Weakly similar to HYPOTHETICAL 23.0 KD PROTEIN IN

IXR1-TFA1 INTERGENIC REGION [Saccharomyces cerevisiae] //1.9e-26:220:81//

Hs.163791:W25348

R-PLACE1000564//ESTs//1.1e-54:302:92//Hs.158520:AI380485

R-PLACE1000583//Human mRNA for KIAA0355 gene, complete cds//5.5e-43:404:

75//Hs.153014:AB002353

R-PLACE1000588//Guanylate binding protein 1, interferon-inducible, 67kD/

/6.1e-79:542:82//Hs.62661:M55542

R-PLACE1000596//ESTs//0.0028:364:59//Hs.106090:AA457030

R-PLACE1000599//Human mRNA for KIAA0118 gene, partial cds//4.3e-49:295:9

0//Hs.154326:D42087

R-PLACE1000610//ESTs//0.0010:104:74//Hs.17413:N45301

R-PLACE1000636//ESTs//1.8e-64:340:95//Hs.100895:AA479308

R-PLACE1000653//Homo sapiens N-acetylglucosamine-phosphate mutase mRNA,

complete cds//5.3e-101:506:96//Hs.5819:AF102265

R-PLACE1000656//Homo sapiens mRNA for JM4 protein, complete CDS (clone I MAGE 546750 and LLNLc110F1857Q7 (RZPD Berlin))//1.4e-102:559:92//Hs.2959 5:AJ005896

R-PLACE1000706//Homo sapiens transcription intermediary factor 1 (TIF1) mRNA, complete cds//2.8e-10:281:64//Hs.128763:AF009353

R-PLACE1000712//ESTs//7.8e-60:317:95//Hs.8245:AA115485

R-PLACE1000716

R-PLACE1000748//ESTs//8.9e-87:466:93//Hs.25245:AA176701

R-PLACE1000749//EST//0.019:186:61//Hs.135443:AI077396

R-PLACE1000755//ESTs, Weakly similar to HYPOTHETICAL HELICASE K12H4.8 IN CHROMOSOME III [C.elegans] //3.9e-40:224:94//Hs.87889:AA262008

R-PLACE1000769//Homo sapiens clone 24566 mRNA sequence//6.5e-27:531:66// Hs.133342:AF070536

R-PLACE1000785//Homo sapiens mRNA for KIAA0648 protein, partial cds//8.5 e-103:513:96//Hs.31921:AB014548

R-PLACE1000786//ESTs//5.2e-93:449:97//Hs.58389:W74482

R-PLACE1000793//H.sapiens mRNA for chemokine HCC-1//0.88:201:60//Hs.2014 4:AF088219

R-PLACE1000798//ESTs//1.1e-97:508:94//Hs.139119:N32189

R-PLACE1000841//ESTs, Highly similar to guanine nucleotide regulatory protein [H.sapiens]//7.7e-31:220:86//Hs.117576:R33135

R-PLACE1000849//ESTs//1.8e-87:459:94//Hs.43100:AA186588

R-PLACE1000856//ESTs//0.0084:224:59//Hs.145906:AI275039

R-PLACE1000863//ESTs, Highly similar to PUTATIVE 40S RIBOSOMAL PROTEIN

YHR148W [Saccharomyces cerevisiae] //2.2e-92:467:95//Hs.6118:AI141558

R-PLACE1000909//ESTs//4.7e-89:435:97//Hs.95744:AI392846

R-PLACE1000931//EST//1.9e-28:261:73//Hs.135545:AI097091

R-PLACE1000948//ESTs//0.034:329:58//Hs.114851:AA608697

R-PLACE1000972//EST//3.3e-24:264:74//Hs.130321:AI002941

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R-PLACE1000977//EST//0.085:153:65//Hs.131646:AI025689
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R-PLACE1000979

R-PLACE1001000//ESTs//4.7e-56:284:96//Hs.117978:AA810725

R-PLACE1001007//ESTs, Moderately similar to MNK1 [H.sapiens] //5.2e-63:34

3:93//Hs.5662:AA868361

R-PLACE1001010//EST//0.96:53:71//Hs.96973:AA351146

R-PLACE1001015//0xytocin receptor//2.8e-25:308:71//Hs.2820:X64878

R-PLACE1001024//ESTs//5.0e-12:79:96//Hs.97910:AA404736

R-PLACE1001036//ESTs//4.0e-15:301:65//Hs.137947:AI025762

R-PLACE1001062//ESTs//5.2e-15:199:73//Hs.138982:AA056120

R-PLACE1001076//ESTs//3.9e-84:406:98//Hs.115455:AA678124

R-PLACE1001088//ESTs//3.0e-106:518:97//Hs.158964:AA639580

R-PLACE1001092//Homo sapiens SEC63 (SEC63) mRNA, complete cds//0.035:259

:59//Hs.31575:AF100141

R-PLACE1001104//ESTs//6.1e-115:582:95//Hs.10972:AA164268

R-PLACE1001118//ESTs//6.9e-81:440:93//Hs.5383:AA913610

R-PLACE1001136//ESTs//7.4e-41:168:83//Hs.95115:AA206594

R-PLACE1001168//ESTs//3.9e-21:116:99//Hs.5897:AA148834

R-PLACE1001171//ESTs, Highly similar to CYTOCHROME B-245 LIGHT CHAIN [H.

sapiens] //0.91:77:71//Hs.115211:AA287527

R-PLACE1001185//ESTs//1.5e-65:330:96//Hs.26368:AA789297

R-PLACE1001238//ESTs, Moderately similar to RNA polymerase I associated

factor [M.musculus] //1.9e-99:512:94//Hs.24884:AA176812

R-PLACE1001241//ESTs//1.1e-81:446:93//Hs.42278:AI073464

R-PLACE1001257//EST//6.4e-46:298:87//Hs.162404:AA573131

R-PLACE1001272//ESTs//0.31:158:61//Hs.42960:N95371

R-PLACE1001279//ESTs//1.8e-77:376:97//Hs.29276:AA427780

R-PLACE1001280//ESTs//1.1e-30:134:89//Hs.163492:AI334460

R-PLACE1001294//ESTs, Moderately similar to GAMETOGENESIS EXPRESSED PROT

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EIN GEG-154 [M.musculus] //2.7e-22:181:84//Hs.48320:AA149548
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R-PLACE1001304//ESTs, Weakly similar to ZINC FINGER PROTEIN 135 [H.sapie

ns] //4.2e-34:195:92//Hs.86276:W27601

R-PLACE1001311//ESTs//9.1e-91:438:97//Hs.41055:AI339056

R-PLACE1001323//Human transmembrane 4 superfamily protein (SAS) mRNA, co

mplete cds//5.5e-44:215:86//Hs.50984:U01160

R-PLACE1001351//ESTs//2.4e-101:494:97//Hs.23944:AI097077

R-PLACE1001366//Small inducible cytokine A5 (RANTES)//8.7e-43:284:85//Hs

.155464:AF088219

R-PLACE1001377//Homo sapiens ADAM10 (ADAM10) mRNA, complete cds//2.3e-81

:431:93//Hs.152005:AF009615

R-PLACE1001383//Homo sapiens clone 24538 mRNA sequence//1.0e-36:192:97//

Hs.12342:AF055030

R-PLACE1001384//Homo sapiens multi PDZ domain protein MUPP1 (MUPP1) mRNA

, complete cds//1.0e-86:456:94//Hs.21301:AF093419

R-PLACE1001387//ESTs//6.0e-74:383:94//Hs.55016:AI298280

R-PLACE1001395//ESTs//2.3e-94:473:95//Hs.22394:N32555

R-PLACE1001399//ESTs//2.6e-41:204:100//Hs.24462:N36348

R-PLACE1001412//Homo sapiens clone 643 unknown mRNA, complete sequence//

2.6e-45:242:95//Hs.110404:AF091087

R-PLACE1001414//ESTs//0.0013:77:75//Hs.144614:AA291800

R-PLACE1001440

R-PLACE1001456//EST//0.76:120:62//Hs.34011:H48115

R-PLACE1001468//ESTs//4.0e-80:403:96//Hs.131832:AI017547

R-PLACE1001484//ESTs//3.0e-16:201:72//Hs.153413:AI248625

R-PLACE1001502//ESTs//8.1e-31:161:99//Hs.126264:AA455617

R-PLACE1001503//ESTs//2.4e-37:176:81//Hs.141581:AA315361

R-PLACE1001517//Homo sapiens hGAA1 mRNA, complete cds//2.1e-57:339:90//H

s.4742:AB006969

```
R-PLACE1001534//ESTs//3.6e-61:304:97//Hs.45207:AI042153
```

R-PLACE1001545//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT

RY !!!! [H.sapiens] //1.6e-22:170:85//Hs.155456:AA707265

R-PLACE1001551//ESTs//1.5e-39:202:98//Hs.139269:AA894431

R-PLACE1001570//EST//1.1e-70:495:82//Hs.144234:W52249

R-PLACE1001602//EST//0.33:297:57//Hs.149839:AI287601

R-PLACE1001603//ESTs//2.0e-17:181:76//Hs.155334:AA827904

R-PLACE1001610//EST//1.1e-86:442:95//Hs.112580:AA608683

R-PLACE1001611//Homo sapiens histone macroH2A1.2 mRNA, complete cds//1.1

e-42:217:97//Hs.75258:AF054174

R-PLACE1001632//ESTs, Highly similar to ZINC FINGER PROTEIN 91 [Homo sa

piens]//1.5e-78:458:91//Hs.114547:AA167095

R-PLACE1001634//ESTs//0.0035:40:97//Hs.101577:AI168526

R-PLACE1001640//ESTs//0.0028:377:57//Hs.131044:D61640

R-PLACE1001672//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING

ENTRY !!!! [H.sapiens] //0.98:141:62//Hs.153060:AA195804

R-PLACE1001691//Homo sapiens okadaic acid-inducible phosphoprotein (0A48

-18) mRNA, complete cds//4.7e-113:545:97//Hs.3688:AF069250

R-PLACE1001692//EST//3.0e-43:430:75//Hs.162975:AA679124

R-PLACE1001705//ESTs//3.0e-81:418:94//Hs.22646:AI374903

R-PLACE1001716//EST//0.76:150:62//Hs.128906:AA983667

R-PLACE1001720//ESTs//2.4e-64:385:90//Hs.60455:AA010993

R-PLACE1001729//ESTs//2.9e-84:418:96//Hs.134740:AA282171

R-PLACE1001739//ESTs, Weakly similar to P68 PROTEIN [H.sapiens]//9.1e-32

:206:89//Hs.6366:AA614113

R-PLACE1001740//EST//6.5e-05:113:68//Hs.139949:AA644266

R-PLACE1001745//ESTs//3.3e-92:473:95//Hs.104270:AA236479

R-PLACE1001746//ESTs//8.8e-93:443:98//Hs.112198:AI423937

R-PLACE1001748//Homo sapiens metalloprotease 1 (MP1) mRNA, complete cds/

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/4.1e-93:540:89//Hs.4812:AF061243
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R-PLACE1001756//ESTs//0.17:157:66//Hs.141565:N64662

R-PLACE1001761

R-PLACE1001771//ESTs//0.92:165:62//Hs.47387:N51980

R-PLACE1001781//ESTs//5.7e-84:437:95//Hs.23363:AA081236

R-PLACE1001799//EST//0.00039:126:65//Hs.123267:AA807352

R-PLACE1001817//Homo sapiens ATP-specific succinyl-CoA synthetase beta s

ubunit (SCS) mRNA, partial cds//1.3e-93:463:95//Hs.40820:AF058953

R-PLACE1001821//Small inducible cytokine A5 (RANTES)//2.7e-35:328:75//Hs

.155464:AF088219

R-PLACE1001845.

R-PLACE1001869//EST//1.0:207:62//Hs.137298:W32868

R-PLACE1001897//ESTs//2.4e-23:219:80//Hs.7503:H50009

R-PLACE1001912//ESTs//1.5e-32:162:78//Hs.136810:AA789098

R-PLACE1001920//Homo sapiens TNF-induced protein GG2-1 mRNA, complete cd

s//3.9e-74:363:97//Hs.17839:AF099936

R-PLACE1001928//Homo sapiens mRNA for KIAA0623 protein, complete cds//0.

85:130:66//Hs.151406:AB014523

R-PLACE1001983//ESTs//2.8e-66:334:96//Hs.110155:AA007313

R-PLACE1001989//ESTs//1.3e-88:453:95//Hs.132717:AA171941

R-PLACE1002046

R-PLACE1002052//ESTs//1.7e-79:428:94//Hs.6737:N32595

R-PLACE1002066//ESTs//2.8e-82:427:94//Hs.132972:AA543094

R-PLACE1002072//ESTs//0.27:108:66//Hs.123163:AA809619

R-PLACE1002073//EST//5.5e-70:369:95//Hs.132339:AI028552

R-PLACE1002090//ESTs//6.3e-73:361:96//Hs.134469:AA731632

R-PLACE1002115//ESTs//4.6e-34:233:88//Hs.163443:R23311

R-PLACE1002119//ESTs//1.2e-88:444:96//Hs.15725:AA521293

R-PLACE1002140//ESTs//6.6e-22:118:100//Hs.22793:W91937

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R-PLACE1002150//ESTs//4.0e-96:465:98//Hs.7312:AI167614
```

R-PLACE1002157//EST, Weakly similar to LINE-1 REVERSE TRANSCRIPTASE HOMO

LOG [H.sapiens] //3.6e-39:400:76//Hs.162172:AA534189

R-PLACE1002163//ESTs//3.2e-83:428:95//Hs.137011:AI185965

R-PLACE1002171//ESTs//5.3e-68:392:90//Hs.62273:AA143745

R-PLACE1002205//ESTs//1.5e-39:211:95//Hs.28338:N48793

R-PLACE1002213//ESTs//5.1e-38:290:83//Hs.146811:AA410788

R-PLACE1002227//EST//1.3e-14:214:72//Hs.46979:N49892

R-PLACE1002256//ESTs//2.4e-100:484:98//Hs.9343:AI004257

R-PLACE1002259//Human Line-1 repeat mRNA with 2 open reading frames//5.8

e-67:501:81//Hs.23094:M19503

R-PLACE1002319//ESTs//1.4e-28:178:92//Hs.7353:AA209308

R-PLACE1002342//Homo sapiens mRNA for KIAA0728 protein, partial cds//1.6

e-95:501:93//Hs.18277:AB018271

R-PLACE1002395//ESTs//3.6e-25:248:77//Hs.3853:AA034291

R-PLACE1002399//ESTs//1.5e-27:238:78//Hs.13014:W26381

R-PLACE1002433//ESTs//4.3e-108:511:98//Hs.98324:AA621959

R-PLACE1002437//EST//1.2e-06:158:61//Hs.159833:T24110

 $R-PLACE1002438//Sjogren\ syndrome\ antigen\ B\ (autoantigen\ La)//0.93:176:60$ 

//Hs.83715:X69804

R-PLACE1002450//ESTs//1.5e-89:432:98//Hs.47371:AA136333

R-PLACE1002465//ESTs//1.6e-92:488:93//Hs.78110:AA741320

R-PLACE1002474//Human matrilin-2 precursor mRNA, partial cds//4.9e-23:16

6:85//Hs.19368:U69263

R-PLACE1002477//ESTs//2.5e-62:305:98//Hs.88605:AA421132

R-PLACE1002493//Homo sapiens signal transducing adaptor molecule 2A (STA

M2) mRNA, complete cds//3.6e-55:307:91//Hs.17200:AF042273

R-PLACE1002499//ESTs//7.4e-72:373:96//Hs.128221:AA972429

R-PLACE1002500//Homo sapiens KIAA0409 mRNA, partial cds//1.2e-40:296:83/

```
/Hs.5158:AB007869
```

R-PLACE1002514//ESTs, Weakly similar to !!!! ALU SUBFAMILY SB1 WARNING E

NTRY !!!! [H.sapiens] //6.4e-14:217:69//Hs.152230:AI140609

R-PLACE1002529//Homo sapiens mRNA for KIAA0713 protein, partial cds//5.1

e-88:582:85//Hs.88756:AB018256

R-PLACE1002532//Homo sapiens BAC clone RG300E22 from 7q21-q31.1//2.7e-19

:116:93//Hs.99348:AC004774

R-PLACE1002537//ESTs//4.8e-93:440:99//Hs.164005:AA766491

R-PLACE1002571//ESTs, Highly similar to ACTIN-LIKE PROTEIN 13E [Drosoph

ila melanogaster]//1.3e-108:555:95//Hs.23259:AA532437

R-PLACE1002578//EST//1.9e-40:337:81//Hs.162404:AA573131

R-PLACE1002583//EST//1.2e-07:264:65//Hs.156414:AI339738

R-PLACE1002591//ESTs//2.3e-67:372:94//Hs.143046:N73778

R-PLACE1002598//ESTs, Highly similar to PROTEIN HI1715 [Haemophilus inf

luenzae] //1.2e-44:228:97//Hs.7527:AA843208

R-PLACE1002604//ESTs//3.3e-106:532:96//Hs.86828:AA632147

R-PLACE1002625//EST//3.8e-13:173:74//Hs.138597:H77749

R-PLACE1002665//Small inducible cytokine A4 (homologous to mouse Mip-1b)

//1.0:189:58//Hs.75703:J04130

R-PLACE1002685//Homo sapiens B cell linker protein BLNK mRNA, alternativ

ely spliced, complete cds//3.8e-79:390:97//Hs.124903:AF068180

R-PLACE1002714//ESTs//8.2e-63:340:93//Hs.7973:H19830

R-PLACE1002722//ESTs, Weakly similar to putative G-protein-coupled recep

tor [H.sapiens] //6.8e-75:445:90//Hs.29202:R71586

R-PLACE1002768//ESTs//1.2e-70:359:95//Hs.132600:H12865

R-PLACE1002772//ESTs//8.1e-49:362:82//Hs.141254:AI334099

R-PLACE1002782//ESTs//2.4e-58:284:98//Hs.143545:AI149014

R-PLACE1002794//ESTs//5.4e-21:114:100//Hs.77365:W93593

R-PLACE1002811//ESTs//6.7e-68:329:98//Hs.78026:AA456955

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R-PLACE1002815//ESTs//6.8e-103:537:93//Hs.5459:AI304392
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R-PLACE1002816//ESTs//3.9e-05:118:68//Hs.98641:AA429916

R-PLACE1002834//ESTs, Highly similar to ZINC FINGER PROTEIN 91 [Homo sa

piens] //2.1e-42:233:94//Hs.61518:AA167094

R-PLACE1002839//ESTs//1.7e-10:292:64//Hs.93012:R96142

R-PLACE1002851//ESTs//1.7e-73:381:95//Hs.135021:AI096756

R-PLACE1002853//ESTs//1.2e-89:453:96//Hs.23630:N57539

R-PLACE1002881//ESTs//1.1e-71:360:96//Hs.34392:AI066762

R-PLACE1002908//EST//2.7e-31:177:94//Hs.147925:AI249332

R-PLACE1002941//ESTs//4.0e-96:519:92//Hs.125139:AA523995

R-PLACE1002962

R-PLACE1002968//ESTs//4.7e-31:420:69//Hs.116518:AA653202

R-PLACE1002991//ESTs//9.0e-81:418:95//Hs.132717:AA171941

R-PLACE1002993//ESTs, Weakly similar to !!!! ALU SUBFAMILY SB WARNING EN

TRY !!!! [H.sapiens] //1.3e-86:502:89//Hs.32232:AA604268

R-PLACE1002996//ESTs//1.9e-44:218:100//Hs.63657:AI144268

R-PLACE1003025//ESTs//8.4e-104:517:96//Hs.10711:AI151499

R-PLACE1003027//Human mRNA for KIAA0238 gene, partial cds//0.97:156:60//

Hs.82042:D87075

R-PLACE1003044//Human onconeural ventral antigen-1 (Nova-1) mRNA, comple

te cds//1.0:200:63//Hs.214:U04840

R-PLACE1003092//ESTs//0.0046:267:60//Hs.133095:AA927777

R-PLACE1003100//ESTs, Highly similar to NODULATION PROTEIN G [Rhizobium

meliloti]//9.5e-94:491:93//Hs.6318:AI131178

R-PLACE1003108//ESTs//0.00065:184:66//Hs.154366:AA527359

R-PLACE1003136//Signal recognition particle 54 kD protein//0.057:317:59/

/Hs.49346:U51920

R-PLACE1003145//ESTs//1.9e-98:534:92//Hs.61929:AA044757

R-PLACE1003153//ESTs//5.8e-76:367:98//Hs.105196:AA483467

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R-PLACE1003174//ESTs//1.7e-44:226:98//Hs.59688:AA453924
```

R-PLACE1003176

R-PLACE1003190//ESTs//1.6e-74:356:99//Hs.121282:AI091453

R-PLACE1003200//ESTs//4.6e-93:461:96//Hs.24321:AA971017

R-PLACE1003205//ESTs//0.037:171:61//Hs.157077:H44802

R-PLACE1003238//ESTs, Weakly similar to KIAA0001 [H.sapiens] //2.5e-82:43

6:94//Hs.58561:W79123

R-PLACE1003249//Human high-affinity copper uptake protein (hCTR1) mRNA,

complete cds//7.9e-44:313:84//Hs.73614:U83460

R-PLACE1003256//EST//9.6e-46:284:88//Hs.162404:AA573131

R-PLACE1003258//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT

RY !!!! [H.sapiens] //8.3e-102:551:92//Hs.52431:AA625326

R-PLACE1003296//ESTs//1.9e-88:451:96//Hs.57749:W92986

R-PLACE1003302//ESTs, Highly similar to ZINC FINGER PROTEIN 43 [Homo sa.

piens] //8.2e-93:458:96//Hs.29147:AA883993

R-PLACE1003334//ESTs, Weakly similar to !!!! ALU CLASS B WARNING ENTRY!

!!! [H.sapiens] //3.3e-94:463:97//Hs.155050:AA908765

R-PLACE1003342//ESTs//6.0e-88:447:96//Hs.107527:R66438

R-PLACE1003343//EST//0.0087:412:58//Hs.159963:AA977701

R-PLACE1003353//Homo sapiens breast cancer antiestrogen resistance 3 pro

tein (BCAR3) mRNA, complete cds//1.1e-99:469:98//Hs.6564:U92715

R-PLACE1003361//ESTs//3.5e-64:332:95//Hs.163861:AI199636

R-PLACE1003366//ESTs//1.0e-87:492:92//Hs.72222:AA158234

R-PLACE1003369//ESTs, Weakly similar to ZK1058.4 [C.elegans]//3.5e-18:10

9:95//Hs.27670:AI051591

R-PLACE1003373//Homo sapiens mRNA for KIAA0472 protein, partial cds//2.6

e-54:279:80//Hs.6874:AB007941

R-PLACE1003375//ESTs//1.7e-88:431:97//Hs.41327:AI039909

R-PLACE1003383//ESTs//0.00084:177:64//Hs.120695:AI377755

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R-PLACE1003401//ESTs//1.1e-16:147:80//Hs.132187:AI039020
R-PLACE1003420//ESTs//1.4e-93:481:94//Hs.122565:AI126840
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R-PLACE1003454//ESTs//4.0e-57:310:93//Hs.121688:AA743697

R-PLACE1003478//EST//1.0:162:63//Hs.147003:AI184671

R-PLACE1003493//ESTs//1.2e-73:383:95//Hs.28852:R64270

R-PLACE1003516//ESTs//3.2e-23:206:80//Hs.138632:H97952

R-PLACE1003519//H.sapiens hnRNP-E1 mRNA//1.7e-22:236:79//Hs.2853:Z29505

R-PLACE1003521//ESTs//5.8e-74:371:96//Hs.30818:AA194980

R-PLACE1003528//ESTs//1.1e-40:219:82//Hs.138856:H47461

R-PLACE1003537//ESTs, Weakly similar to multispanning membrane protein [

H.sapiens] //7.4e-69:338:98//Hs.110439:N93209

R-PLACE1003553//ESTs//2.2e-87:438:97//Hs.132022:AI040321

R-PLACE1003566//ESTs//1.2e-62:298:92//Hs.30799:AI052591

R-PLACE1003575//Homo sapiens mRNA, chromosome 1 specific transcript KIAA

0487//2.4e-22:145:80//Hs.92381:AB007956

R-PLACE1003583//ESTs, Weakly similar to hypothetical L1 protein [H.sapie

ns]//1.5e-14:264:65//Hs.158253:R86178

R-PLACE1003584

R-PLACE1003592//ESTs//1.3e-15:213:69//Hs.139507:T77542

R-PLACE1003593//ESTs, Highly similar to FRG1 gene product [H.sapiens] //5

.8e-75:459:89//Hs.23884:AI377106

R-PLACE1003596//ESTs//0.011:273:61//Hs.71719:AA142875

R-PLACE1003602//Homo sapiens mRNA expressed in placenta//7.8e-97:576:88/

/Hs.56851:D83200

R-PLACE1003605//ESTs//3.7e-86:407:99//Hs.136057:AA988299

R-PLACE1003611//ESTs//1.0:78:71//Hs.101248:T26446

R-PLACE1003618//ESTs//6.8e-30:281:79//Hs.114455:AA411943

R-PLACE1003625//ESTs//7.2e-78:377:98//Hs.102708:AA292285

R-PLACE1003638//ESTs//6.7e-38:274:82//Hs.138852:AA284247

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R-PLACE1003669//ESTs//9.7e-83:418:95//Hs.4842:AI342607
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R-PLACE1003704//ESTs//3.0e-13:99:89//Hs.81648:W26521

R-PLACE1003709//ESTs//0.019:178:60//Hs.32100:N59866

R-PLACE1003711//ESTs//0.99:126:63//Hs.47005:N98639

R-PLACE1003723//ESTs//1.7e-89:448:96//Hs.157222:AA766987

R-PLACE1003738//ESTs//2.5e-36:182:100//Hs.122162:AI057087

R-PLACE1003760//Human globin gene//1.9e-98:538:91//Hs.100090:M69023

R-PLACE1003762//EST//2.9e-15:125:85//Hs.162083:AA487512

R-PLACE1003768//Human P042 gene, complete cds//3.1e-18:300:69//Hs.158302

: U88965

R-PLACE1003771//ESTs//1.2e-09:64:100//Hs.23799:AI003798

R-PLACE1003783//ESTs, Weakly similar to D2085.5 [C.elegans]//3.8e-38:199

:97//Hs.115197:AA215757

R-PLACE1003784//ESTs//3.7e-87:428:97//Hs.157985:AI366909

R-PLACE1003795//Homo sapiens mRNA for KIAA0575 protein, complete cds//3.

2e-36:236:88//Hs.153468:AB011147

R-PLACE1003833//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNIN

G ENTRY !!!! [H.sapiens] //8.5e-62:313:96//Hs.121020:AA526092

R-PLACE1003850//ESTs//4.0e-67:351:96//Hs.159303:T91059

R-PLACE1003858//ESTs//0.96:87:66//Hs.107112:AA679058

R-PLACE1003864

R-PLACE1003870//EST//2.9e-34:281:79//Hs.160895:AI365871

R-PLACE1003885

R-PLACE1003886//ESTs//6.7e-85:410:97//Hs.25129:W93595

R-PLACE1003888//ESTs//0.0085:165:64//Hs.96739:AA441915

R-PLACE1003900//EST//2.4e-05:129:69//Hs.127931:AA969259

R-PLACE1003903//ESTs, Highly similar to CTP SYNTHASE [Homo sapiens] //1.

5e-54:282:96//Hs.58553:AA100804

R-PLACE1003915//EST//0.87:55:76//Hs.145930:AI275760

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R-PLACE1003923//ESTs//1.7e-89:456:95//Hs.14125:AA156236
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R-PLACE1003932//ESTs//3.0e-50:340:84//Hs.151208:AI126110

R-PLACE1003936//EST//1.8e-08:208:65//Hs.162656:AA603567

R-PLACE1003968//ESTs//7.4e-49:301:90//Hs.93850:AA115330

R-PLACE1004104//ESTs//1.9e-46:254:94//Hs.96802:AA443231

R-PLACE1004114//ESTs//1.2e-64:322:97//Hs.28928:AI052052

R-PLACE1004118//ESTs//1.0e-83:404:98//Hs.112764:AA609770

R-PLACE1004128//ESTs//5.3e-80:415:95//Hs.11835:AA040244

R-PLACE1004149//ESTs//7.2e-25:331:72//Hs.141084:H11714

R-PLACE1004156//Homo sapiens PYRIN (MEFV) mRNA, complete cds//2.0e-56:49

1:76//Hs.113283:AF018080

R-PLACE1004161//ESTs//2.0e-59:355:88//Hs.13830:AA918601

R-PLACE1004183//Homo sapiens cytochrome c oxidase assembly protein COX11

(COX11) mRNA, complete cds//4.7e-78:434:91//Hs.153504:AF044321

R-PLACE1004197

R-PLACE1004203//Homo sapiens GPI-anchored membrane protein CDw108 precursor, mRNA, complete cds//1.5e-105:501:98//Hs.24640:AF069493

R-PLACE1004242//ESTs//1.0e-71:364:87//Hs.138632:H97952

R-PLACE1004256//EST//0.0011:347:61//Hs.131385:AI022630

R-PLACE1004257//EST//0.027:99:71//Hs.97587:AA398209

R-PLACE1004258//KERATIN, TYPE I CYTOSKELETAL 14//0.72:180:63//Hs.117729: J00124

R-PLACE1004270//ESTs//0.011:264:59//Hs.110044:AA181800

R-PLACE1004274//Human retinoic acid receptor-beta associated open readin

g frame, complete sequence//0.28:121:66//Hs.1938:S82362

 $R-PLACE1004277//Homo\ sapiens\ two\ pore\ domain\ K+\ channel\ (TASK-2)\ mRNA,\ c$ 

omplete cds//1.4e-107:581:91//Hs.127007:AF084830

R-PLACE1004284//ESTs//5.0e-22:187:82//Hs.23141:W92114

R-PLACE1004289//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT

RY !!!! [H.sapiens] //2.9e-28:279:77//Hs.38687:AA744496

R-PLACE1004302//ESTs, Weakly similar to SOF1 PROTEIN [Saccharomyces cerevisiae] //8.2e-61:313:95//Hs.71435:AI253099

R-PLACE1004316//H.sapiens mRNA for apoptosis specific protein//6.0e-115:

 $R-PLACE 1004336//Cytochrome\ P450\ ,\ \textbf{subfamily}\ I\ (\textbf{aromatic compound-inducibl}$ 

e), polypeptide 2//6.7e-69:572:77//Hs.1361:M55053

590:94//Hs.11171:Y11588

R-PLACE1004358//Homo sapiens connector enhancer of KSR-like protein CNK1 mRNA, complete cds//7.7e-72:379:93//Hs.16232:AF100153

R-PLACE1004376//ESTs//0.49:362:59//Hs.138086:AI056309

R-PLACE1004384//EST//1.0:47:76//Hs.128546:AA905556

R-PLACE1004388//ESTs, Weakly similar to contains similarity to ATP/GTP-b inding site motif [C.elegans] //1.3e-98:572:90//Hs.14202:N46000

R-PLACE1004405//ESTs//3.4e-99:507:95//Hs.28792:AI343467

R-PLACE1004425//ESTs//2.7e-85:442:95//Hs.12544:N53665

R-PLACE1004428//ESTs//1.0e-07:114:78//Hs.140225:AA704101

R-PLACE1004437//Human NAD+-specific isocitrate dehydrogenase beta subuni t precursor, mRNA, nuclear gene encoding mitochondrial protein, complete cds//9.4e-90:516:88//Hs.155410:U49283

R-PLACE1004451

R-PLACE1004460//ESTs//5.4e-14:338:64//Hs.97464:AA662980

R-PLACE1004467//ESTs//3.3e-85:467:92//Hs.9527:W52721

R-PLACE1004471//ESTs//3.0e-73:389:94//Hs.23240:R46578

R-PLACE1004473//ESTs, Weakly similar to F20D1.2 [C.elegans] //3.8e-101:51

0:95//Hs.16986:W89194

R-PLACE1004491//Human mitochondrial 1,25-dihydroxyvitamin D3 24-hydroxyl

ase mRNA, complete cds//0.23:278:61//Hs.89663:L13286

R-PLACE1004506//ESTs//2.5e-98:559:90//Hs.19447:AI057117

R-PLACE1004510//ESTs//1.5e-91:436:98//Hs.24846:AI420493

R-PLACE1004516//EST//1.7e-66:344:96//Hs.99303:AA453164

R-PLACE1004518//ESTs//5.2e-79:410:94//Hs.27091:AA436553

R-PLACE1004548//Homo sapiens mRNA for small GTP-binding protein, complet

e cds//1.8e-40:332:72//Hs.115325:D84488

R-PLACE1004550

R-PLACE1004564//ESTs//5.5e-76:367:98//Hs.49683:AA564742

R-PLACE1004629//ESTs, Weakly similar to OS-9 precurosor [H.sapiens]//8.1

e-40:272:87//Hs.7100:W07181

R-PLACE1004645//ESTs//6.3e-14:83:100//Hs:17270:AA701903

R-PLACE1004646//ESTs//3.7e-22:231:76//Hs.141250:N29734

R-PLACE1004658//ESTs//2.0e-12:109:84//Hs.23508:AA101113

R-PLACE1004664//Homo sapiens mRNA for KIAA0714 protein, partial cds//7.8

e-23:129:99//Hs.123129:AB018257

R-PLACE1004672//ESTs//2.0e-50:256:98//Hs.136367:AI144254

R-PLACE1004674//Homo sapiens calcium binding protein (ALG-2) mRNA, compl

ete cds//1.8e-90:510:91//Hs.80019:AF035606

R-PLACE1004681//EST//2.1e-08:283:62//Hs.99543:AA461482

R-PLACE1004686

R-PLACE1004691//EST//7.3e-42:305:82//Hs.141833:AA021552

R-PLACE1004693//ESTs//0.014:135:64//Hs.145333:AI251374

R-PLACE1004716//ESTs, Weakly similar to No definition line found [C.eleg

ans]//3.4e-80:413:94//Hs.23528:AI279571

R-PLACE1004722//EST//0.14:165:63//Hs.18213:T97997

R-PLACE1004736//ESTs//1.0e-72:385:94//Hs.10657:N63911

R-PLACE1004740//ESTs//1.0:267:58//Hs.101661:AA416619

R-PLACE1004743//EST//0.45:94:69//Hs.147174:AI192195

R-PLACE1004751//EST//9.8e-32:174:83//Hs.147901:AI223374

R-PLACE1004773//Homo sapiens inversin protein mRNA, complete cds//2.7e-8

9:437:96//Hs.104715:AF084367

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R-PLACE1004777//ESTs//7.4e-68:351:94//Hs.23395:AA398548
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R-PLACE1004793//ESTs//1.3e-53:290:78//Hs.142375:AA398619

R-PLACE1004804//Homo sapiens mRNA for KIAA0606 protein, partial cds//1.9

e-99:580:88//Hs.38176:AB011178

R-PLACE1004813//ESTs//7.6e-86:433:96//Hs.85640:AA535856

R-PLACE1004814//Homo sapiens okadaic acid-inducible phosphoprotein (0A48

-18) mRNA, complete cds//1.1e-108:358:99//Hs.3688:AF069250

R-PLACE1004815//EST//4.7e-50:333:84//Hs.142196:AA258356

R-PLACE1004824//Protein kinase, interferon-inducible double stranded RNA dependent//4.8e-46:450:76//Hs.73821:M35663

R-PLACE1004827//ESTs//2.3e-48:250:96//Hs.138766:AA342185

R-PLACE1004836//ESTs//2.7e-39:222:94//Hs.78661:AA195299

R-PLACE1004838//EST//0.056:198:60//Hs.129589:AA995901

R-PLACE1004840//ESTs, Highly similar to TRANSCRIPTIONAL ACTIVATOR GCN5

[Saccharomyces cerevisiae] //6.5e-71:381:93//Hs.8383:AA013272

R-PLACE1004868//ESTs//4.9e-70:367:94//Hs.100895:AA479308

R-PLACE1004885//Homo sapiens protein phosphatase with EF-hands-2 long fo

rm (PPEF-2) mRNA, complete cds//1.8e-37:330:78//Hs.113259:AF023456

R-PLACE1004900//EST//1.2e-46:306:86//Hs.149580:AI281881

R-PLACE1004902//Sucrase-isomaltase//0.87:254:61//Hs.2996:X63597

R-PLACE1004913//ESTs//4.5e-75:375:96//Hs.91115:AI221563

R-PLACE1004918//ESTs//2.6e-103:519:95//Hs.143607:AI424948

R-PLACE1004930//Homo sapiens TNF-induced protein GG2-1 mRNA, complete cd

s//6.6e-102:532:93//Hs.17839:AF099936

R-PLACE1004934//EST//0.035:156:67//Hs.162071:AA478980

R-PLACE1004937//ESTs, Weakly similar to F55B12.3 [C.elegans]//6.4e-80:40

9:95//Hs.31945:AA702166

R-PLACE1004969//ESTs//9.8e-18:101:99//Hs.112837:N78013

R-PLACE1004972//ESTs//1.3e-65:337:95//Hs.75798:H29106

R-PLACE1004979//EST//1.2e-96:475:96//Hs.120158:AA708789

R-PLACE1004982//ESTs//1.0e-98:471:98//Hs.106496:AI291776

R-PLACE1004985//ESTs//2.1e-88:456:93//Hs.135050:AI420335

R-PLACE1005026

R-PLACE1005027//ESTs, Weakly similar to N-methyl-D-aspartate receptor glutamate-binding chain [R.norvegicus]//0.72:145:66//Hs.11215:N56719

R-PLACE1005046//Homo sapiens mRNA for KIAA0575 protein, complete cds//5.

3e-66:297:88//Hs.153468:AB011147

R-PLACE1005052//ESTs, Weakly similar to weak similarity to rat cytosolic acyl coenzyme A thioester hydrolase [C.elegans]//1.2e-106:543:95//Hs.18 625:AI074605

R-PLACE1005066//ESTs//3.9e-92:459:96//Hs.62684:AA806103

R-PLACE1005077//Human triadin mRNA, complete cds//1.8e-05:121:69//Hs.687 31:U18985

R-PLACE1005085//Homo sapiens PYRIN (MEFV) mRNA, complete cds//6.6e-49:31 4:74//Hs.113283:AF018080

R-PLACE1005086//ESTs//1.2e-73:379:94//Hs.110128:AA584364

R-PLACE1005101//Homo sapiens (clone zap128) mRNA, 3' end of cds//8.0e-99:531:92//Hs.75437:L40401

R-PLACE1005102//ESTs//7.2e-68:493:84//Hs.10593:AI201336

R-PLACE1005108//Human DNA fragmentation factor-45 mRNA, complete cds//9.

2e-40:232:82//Hs.155344:U91985

R-PLACE1005111//EST//8.1e-10:189:68//Hs.136356:AA493225

R-PLACE1005128//ESTs//1.4e-78:501:87//Hs.15093:AA203423

R-PLACE1005146//ESTs//4.8e-93:460:97//Hs.37896:AA777349

R-PLACE1005162//ESTs//7.5e-51:277:95//Hs.28838:AI089013

R-PLACE1005176//ESTs//5.4e-75:366:97//Hs.48119:AA454227

R-PLACE1005181//EST//0.012:172:66//Hs.147107:AI190589

R-PLACE1005187//ESTs//5.6e-72:363:95//Hs.16577:AI022830

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R-PLACE1005206//ESTs//5.3e-48:203:88//Hs.31792:H45211
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R-PLACE1005232//ESTs//5.1e-41:287:84//Hs.138552:R99532

R-PLACE1005243//ESTs//1.1e-48:348:83//Hs.113310:R16767

R-PLACE1005261//ESTs//0.19:175:62//Hs.124337:AA829524

R-PLACE1005266//ESTs//1.9e-22:388:66//Hs.124146:AA699633

R-PLACE1005277//ESTs//1.5e-29:314:72//Hs.163710:AA024516

R-PLACE1005287//ESTs//3.6e-95:456:98//Hs.49282:AA970322

R-PLACE1005305//ESTs//9.9e-71:428:88//Hs.144855:AI197937

R-PLACE1005308//ESTs//3.8e-32:173:96//Hs.58239:AA215797

R-PLACE1005313//ESTs//5.2e-74:409:93//Hs.33368:AA206614

R-PLACE1005327//Chromosome 1 specific transcript KIAA0491//1.7e-104:537:

94//Hs.136309:AB007960

R-PLACE1005331//ESTs//2.1e-91:487:93//Hs.9291:AI189343

R-PLACE1005335//ESTs, Weakly similar to F23B2.4 [C.elegans]  $\frac{1}{3.8e-90:442}$ 

:97//Hs.70202:AA732975

R-PLACE1005373//ESTs//8.0e-93:526:91//Hs.98541:N38901

R-PLACE1005374//Homo sapiens KIAA0395 mRNA, partial cds//3.3e-44:344:80/

/Hs.43681:AL022394

R-PLACE1005409//EST//0.43:174:59//Hs.162077:AA479978

R-PLACE1005453//EST//7.9e-57:330:90//Hs.162306:AA555304

R-PLACE1005467//ESTs//2.2e-42:294:84//Hs.142257:AA188423

R-PLACE1005471//Human Line-1 repeat mRNA with 2 open reading frames//2.3

e-88:561:86//Hs.23094:M19503

R-PLACE1005477//Human methionine aminopeptidase mRNA, complete cds//6.9e

-80:549:83//Hs.78935:U29607

R-PLACE1005480//EST//0.99:39:82//Hs.157275:AI364046

R-PLACE1005481//EST//1.5e-31:281:79//Hs.132635:AI032875

R-PLACE1005494//Homo sapiens mRNA for semaphorin E, complete cds//0.036:

319:59//Hs.62705:AB000220

R-PLACE1005502//Homo sapiens formin binding protein 21 mRNA, complete cd s//5.4e-57:277:98//Hs.28307:AF071185

R-PLACE1005526//ESTs//2.5e-30:233:83//Hs.119304:AA443325

R-PLACE1005528//Homo sapiens mRNA for cartilage-associated protein (CASP)//8.9e-20:321:69//Hs.155481:AJ006470

R-PLACE1005530//ESTs//3.7e-81:438:92//Hs.103380:AI291325

R-PLACE1005550//ESTs, Highly similar to HYPOTHETICAL 40.2 KD PROTEIN K1 2H4.3 IN CHROMOSOME III [Caenorhabditis elegans] //5.2e-95:458:98//Hs.381 14:N62927

R-PLACE1005554//ESTs//8.8e-36:267:86//Hs.98288:AA203555

R-PLACE1005557//ESTs, Highly similar to MITOCHONDRIAL 60S RIBOSOMAL PRO TEIN L2 PRECURSOR [Saccharomyces cerevisiae] //2.2e-64:345:94//Hs.7736:W8 1261

R-PLACE1005574//ESTs//2.3e-27:231:83//Hs.117771:R99835

R-PLACE1005584//ESTs//1.6e-36:188:98//Hs.152050:AA724612

R-PLACE1005595//ESTs//1.6e-91:453:96//Hs.85079:AI276023

R-PLACE1005603//ESTs//8.2e-99:533:93//Hs.96357:AI026927

R-PLACE1005611//ESTs//5.2e-28:183:89//Hs.24941:AA261857

R-PLACE1005623//ESTs//1.4e-102:505:96//Hs.58382:AA808964

R-PLACE1005630

R-PLACE1005639//ESTs//1.4e-51:256:98//Hs.1975:W72452

R-PLACE1005646//Homo sapiens RNA helicase-related protein mRNA, complete cds//1.0e-111:585:93//Hs.8765:AF083255

R-PLACE1005656//ESTs//2.7e-88:469:92//Hs.164054:AA528169

R-PLACE1005666//Homo sapiens X-ray repair cross-complementing protein 2

(XRCC2) mRNA, complete cds//3.3e-24:401:66//Hs.129727:AF035587

R-PLACE1005698//ESTs//0.00013:82:79//Hs.116331:AA629355

R-PLACE1005727//EST//0.15:206:63//Hs.105002:AA449332

R-PLACE1005730//EST//0.0014:129:70//Hs.127931:AA969259

R-PLACE1005739//ESTs, Moderately similar to unknown intracellular protei

n [M.musculus] //1.3e-42:236:94//Hs.23889:AI341137

R-PLACE1005755//ESTs//2.8e-32:308:80//Hs.159821:AA524070

R-PLACE1005763//Human mRNA for KIAA0118 gene, partial cds//3.3e-47:268:8

7//Hs.154326:D42087

R-PLACE1005799//ESTs, Highly similar to HYPOTHETICAL 68.7 KD PROTEIN ZK

757.1 IN CHROMOSOME III [Caenorhabditis elegans] //7.7e-15:88:98//Hs.1098

57:AA088385

R-PLACE1005802//ESTs//2.8e-19:208:76//Hs.9271:W30941

R-PLACE1005803//ESTs//2.6e-75:417:92//Hs.71414:AA131327

R-PLACE1005804//EST//6.5e-20:182:70//Hs.149844:AI287693

R-PLACE1005828//ESTs//3.0e-15:194:77//Hs.106236:N50058

R-PLACE1005834//Retinoblastoma 1 (including osteosarcoma)//0.040:435:58/

/Hs.75770:L41870

R-PLACE1005845//EST//5.0e-61:294:99//Hs.133202:AI050965

R-PLACE1005850//ESTs//3.4e-82:425:96//Hs.7966:AI203471

R-PLACE1005851//ESTs//2.9e-21:165:84//Hs.23607:N98305

R-PLACE1005876//ESTs//0.48:296:57//Hs.39140:AI041842

R-PLACE1005884//ESTs//0.0027:177:66//Hs.150295:AA570558

R-PLACE1005898//ESTs//1.7e-98:467:98//Hs.159475:AI339981

R-PLACE1005921//ESTs//5.8e-96:480:95//Hs.30822:AA885501

R-PLACE1005923//ESTs//1.8e-66:333:96//Hs.150890:AI341793

R-PLACE1005925//Human Line-1 repeat mRNA with 2 open reading frames//2.8

e-27:382:70//Hs.23094:M19503

R-PLACE1005932//ESTs, Moderately similar to MNK1 [H.sapiens] //1.1e-70:37

7:93//Hs.5662:AA868361

R-PLACE1005934//ESTs//1.0e-42:251:91//Hs.25092:AA922142

R-PLACE1005936//ESTs//1.2e-88:461:94//Hs.94125:N62913

R-PLACE1005951//ESTs//1.4e-83:533:86//Hs.21148:AI183729

## R-PLACE1005953

R-PLACE1005955//ESTs, Highly similar to HYPOTHETICAL 54.2 KD PROTEIN IN CDC12-ORC6 INTERGENIC REGION [Saccharomyces cerevisiae] //2.2e-83:494:88 //Hs.108117:AI097079

R-PLACE1005966//ESTs//1.1e-95:465:97//Hs.98510:AI016239

R-PLACE1005968//EST//0.26:103:66//Hs.161300:AI420897

R-PLACE1005990

R-PLACE1006002//Human mRNA for KIAA0355 gene, complete cds//2.0e-45:481:74//Hs.153014:AB002353

R-PLACE1006003//ESTs, Highly similar to HYPOTHETICAL 30.3 KD PROTEIN IN APE1/LAP4-CWP1 INTERGENIC REGION [Saccharomyces cerevisiae] //3.1e-112:5 93:93//Hs.111449:AI192946

R-PLACE1006011//ESTs, Moderately similar to NAD(+) ADP-RIBOSYLTRANSFERAS E [D.melanogaster] //5.7e-100:596:88//Hs.24284:AA595596

R-PLACE1006017//ESTs//4.2e-18:296:68//Hs.133350:AI056276

R-PLACE1006037//ESTs, Weakly similar to T23D8.3 [C.elegans]//4.1e-102:49 1:98//Hs.61164:AI096332

R-PLACE1006040//ESTs//1.2e-92:443:98//Hs.111680:N93765

R-PLACE1006076//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNIN G ENTRY !!!! [H.sapiens] //2.0e-26:213:77//Hs.139007:H74314

R-PLACE1006119//ESTs//0.14:257:61//Hs.113149:AA908904

R-PLACE1006129//ESTs//3.8e-54:285:97//Hs.18827:W68002

R-PLACE1006139//ESTs, Highly similar to HYPOTHETICAL 52.9 KD PROTEIN IN SAP155-YMR31 INTERGENIC REGION [Saccharomyces cerevisiae] //2.6e-99:560: 91//Hs.5249:U55977

R-PLACE1006143//Amylo-1,6-glucosidase, 4-alpha-glucanotransferase (glycogen debranching enzyme, glycogen storage disease type III)//0.038:463:59 //Hs.904:U84010

R-PLACE1006157//ESTs//0.014:341:58//Hs.121773:AI357886

R-PLACE1006159//EST//0.00036:247:61//Hs.140054:AA668925

R-PLACE1006164//ESTs//2.6e-31:362:73//Hs.141024:H07128

R-PLACE1006167//Homo sapiens chromosome 19, cosmid F23149//5.8e-54:286:9

4//Hs.152894:AC005239

R-PLACE1006170//ESTs, Highly similar to ALPHA-ADAPTIN [Rattus norvegicu

s]//2.7e-79:393:96//Hs.19121:AI125280

R-PLACE1006187//Homo sapiens cyclin E2 mRNA, complete cds//5.1e-118:597:

95//Hs.30464:AF091433

R-PLACE1006195//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT

RY !!!! [H.sapiens] //6.8e-94:532:91//Hs.105216:AI361807

R-PLACE1006196//ESTs//3.2e-66:382:90//Hs.18665:T99507

R-PLACE1006205//EST//1.7e-89:448:96//Hs.116665:AA669114

R-PLACE1006223//Human RNaseP protein p38 (RPP38) mRNA, complete cds//0.9

0:304:58//Hs.94986:U77664

R-PLACE1006225//ESTs//7.2e-96:474:97//Hs.91165:AI079555

R-PLACE1006236//ESTs//8.8e-105:535:95//Hs.7919:AI341472

R-PLACE1006239//Homo sapiens BAC clone RG118D07 from 7q31//3.2e-99:497:9

5//Hs.3781:AC004142

 $R-PLACE 1006246//ESTs, \ Weakly \ similar \ to \ CMP-sialic \ acid \ transporter \ [M.m.]$ 

usculus]//1.3e-104:532:95//Hs.41151:AI301961

R-PLACE1006248//Homo sapiens mRNA for KIAA0648 protein, partial cds//3.0

e-97:499:95//Hs.31921:AB014548

R-PLACE1006262//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNIN

G ENTRY !!!! [H.sapiens] //1.6e-07:321:62//Hs.53057:W67839

R-PLACE1006288//Voltage-dependent anion channel 1//3.8e-100:605:88//Hs.2

060:L06132

R-PLACE1006318//ESTs//2.4e-102:536:94//Hs.8109:AA005265

R-PLACE1006325//ESTs//5.2e-105:518:96//Hs.102319:AI246503

R-PLACE1006335//ESTs//5.1e-45:254:93//Hs.153585:R70900

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R-PLACE1006357//EST//6.5e-09:309:62//Hs.132493:AA923168
R-PLACE1006360//Human mRNA for KIAA0090 gene, partial cds//0.0097:381:58
//Hs.154797:D42044
R-PLACE1006368//ESTs//7.9e-85:412:97//Hs.150587:AI079284
R-PLACE1006371//ESTs//7.7e-74:442:88//Hs.143671:W61053
R-PLACE1006382
R-PLACE1006385//ESTs//5.3e-06:346:61//Hs.163706:AA515748
R-PLACE1006412//EST//7.7e-46:306:86//Hs.149580:AI281881
R-PLACE1006414//Homo sapiens LIM protein mRNA, complete cds//4.1e-43:551
:69//Hs.154103:AF061258
R-PLACE1006438//ESTs//1.1e-77:284:86//Hs.24545:AI278629
R-PLACE1006445//ESTs//4.4e-53:259:99//Hs.24481:AA573139
R-PLACE1006469//ESTs//9.4e-102:482:98//Hs.7218:AA936961
R-PLACE1006470//ESTs//1.0:271:57//Hs.144517:AA938297
R-PLACE1006482//ESTs//4.0e-61:354:92//Hs.51305:T47418
R-PLACE1006492//EST//1.8e-09:48:91//Hs.144451:AA827722
R-PLACE1006506//ESTs//0.012:161:61//Hs.145333:AI251374
R-PLACE1006521//Human mRNA for KIAA0013 gene, complete cds//2.1e-15:415:
63//Hs.48824:D87717
R-PLACE1006531//ESTs//5.6e-31:213:87//Hs.125153:AA453723
R-PLACE1006534//ESTs//6.5e-101:512:95//Hs.27763:W46368
R-PLACE1006540//ESTs//7.3e-40:320:79//Hs.121659:H02532
R-PLACE1006552//EST//0.38:418:56//Hs.140470:AA765214
R-PLACE1006598//ESTs//4.0e-80:409:95//Hs.142868:AI128443
R-PLACE1006615//Homo sapiens eukaryotic translation initiation factor el
F3, p35 subunit mRNA, complete cds//9.3e-118:590:95//Hs.155377:U97670
R-PLACE1006617//ESTs//8.1e-31:246:83//Hs.139128:AA205322
R-PLACE1006626//ESTs//0.90:98:68//Hs.96322:AA541615
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R-PLACE1006629//Human mRNA for KIAA0386 gene, complete cds//5.3e-33:315:

```
78//Hs.101359:AB002384
 R-PLACE1006640//ESTs//3.7e-26:137:100//Hs.32672:W16522
 R-PLACE1006673//Interleukin 10//8.4e-47:330:83//Hs.2180:M57627
 R-PLACE1006678//ESTs//1.1e-13:87:98//Hs.34035:D87736
 R-PLACE1006704//ESTs//2.6e-65:394:89//Hs.30582:D12214
 R-PLACE1006731//Homo sapiens clone 23923 mRNA sequence//1.9e-102:486:98/
 /Hs.12472:AF038172
 R-PLACE1006754//EST//1.0e-61:381:89//Hs.14727:T83861
 R-PLACE1006760//Homo sapiens clone 24800 mRNA sequence//3.8e-73:394:93//
 Hs.7252:AF070622
 R-PLACE1006779//ESTs//1.4e-69:405:90//Hs.136235:AA262658
 R-PLACE1006782//EST//1.8e-25:197:86//Hs.137257:N33234
 R-PLACE1006792//ESTs//1.8e-43:317:84//Hs.139190:N55515
 R-PLACE1006795//ESTs//6.4e-68:350:95//Hs.11092:AA916335
 R-PLACE1006800//ESTs//1.9e-55:268:100//Hs.126695:AA917989
 R-PLACE1006805//ESTs//6.6e-91:484:93//Hs.94262:AA768847
 R-PLACE1006815//ESTs//2.1e-49:364:83//Hs.142031:AA809159
 R-PLACE1006819//ESTs, Highly similar to LINE-1 REVERSE TRANSCRIPTASE HO
 MOLOG [Homo sapiens] //1.0e-87:481:92//Hs.141263:H64113
 R-PLACE1006829//ESTs//5.7e-43:332:83//Hs.19906:AA456933
 R-PLACE1006860//ESTs//0.96:138:63//Hs.136649:AA828359
 R-PLACE1006867//ESTs//1.4e-98:478:97//Hs.10299:N35008
 R-PLACE1006878//EST//8.4e-48:243:97//Hs.54970:N93536
R-PLACE1006883//EST//3.1e-46:300:88//Hs.162404:AA573131
 R-PLACE1006901//ESTs//3.0e-95:496:94//Hs.47546:AA181348
 R-PLACE1006904//ESTs//5.8e-18:304:68//Hs.125816:AA806089
R-PLACE1006917//Endothelin receptor type B//0.00012:451:60//Hs.82002:D13
 168
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R-PLACE1006932//ESTs//4.6e-56:285:96//Hs.114727:AI379514

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R-PLACE1006935//ESTs//3.6e-12:157:73//Hs.161714:AA229078
R-PLACE1006958//Human mRNA for KIAA0201 gene, complete cds//3.2e-25:494:
63//Hs.36927:D86956
 R-PLACE1006961//Tyrosine aminotransferase//2.5e-46:471:74//Hs.2999:X5252
 R-PLACE1006962//ESTs, Moderately similar to plakophilin 2b [H.sapiens] //
9.0e-29:324:68//Hs.154257:AI275982
R-PLACE1006966//ESTs//4.5e-99:470:99//Hs.46913:AI017636
R-PLACE1006989//ESTs//2.2e-68:353:97//Hs.14394:R61257
R-PLACE1007014//ESTs//3.4e-86:457:94//Hs.129819:AA838366
R-PLACE1007021//ESTs//1.6e-93:539:90//Hs.7111:U55971
R-PLACE1007045//Human Line-1 repeat mRNA with 2 open reading frames//6.6
e-83:584:82//Hs.23094:M19503
R-PLACE1007053//ESTs//4.2e-85:550:88//Hs.7984:AI202575
R-PLACE1007097//ESTs//6.4e-78:493:86//Hs.56406:N91027
R-PLACE1007105//ESTs//5.3e-70:381:91//Hs.22605:N74202
R-PLACE1007111//ESTs//8.6e-75:358:99//Hs.145629:AA398646
R-PLACE1007112//ESTs//6.9e-69:371:94//Hs.71922:AA148417
R-PLACE1007132//ESTs//1.2e-36:373:69//Hs.10762:W28948
R-PLACE1007140//ESTs//1.7e-70:360:96//Hs.56179:W56794
R-PLACE1007178//EST//0.68:85:65//Hs.147010:AI184765
R-PLACE1007226//ESTs//3.1e-78:452:90//Hs.8033:N94998
R-PLACE1007238//ESTs//5.2e-70:362:95//Hs.85636:AA740619
R-PLACE1007239//Human mRNA for transcription elongation factor S-II, hS-
II-T1, complete cds//6.3e-93:534:89//Hs.80598:D50495
R-PLACE1007242//ESTs//1.2e-80:390:98//Hs.117325:AA699450
R-PLACE1007243//ESTs, Weakly similar to transporter protein [H.sapiens] /
/3.7e-73:357:98//Hs.18272:N78499
R-PLACE1007257//Homo sapiens mRNA for dia-156 protein//4.3e-85:487:91//H
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s.121556:Y15909
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R-PLACE1007274//ESTs//4.3e-79:430:93//Hs.146023:AI275071

R-PLACE1007276//ESTs//1.5e-33:338:74//Hs.142850:R38419

R-PLACE1007282//ESTs//4.8e-98:532:93//Hs.10071:AA100812

R-PLACE1007286//Human mRNA for KIAA0118 gene, partial cds//2.9e-50:518:7

4//Hs.154326:D42087

R-PLACE1007301

R-PLACE1007317

R-PLACE1007342

R-PLACE1007346//Homo sapiens estrogen-responsive B box protein (EBBP) mR

NA, complete cds//1.2e-66:367:91//Hs.76596:AF096870

R-PLACE1007367//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT

RY !!!! [H.sapiens] //2.2e-98:488:96//Hs.24359:AA699594

R-PLACE1007375//ESTs//2.3e-67:375:92//Hs.33368:AA206614

R-PLACE1007386//ESTs//0.020:242:62//Hs.42768:AI129945

R-PLACE1007402//ESTs//1.6e-91:441:97//Hs.26243:AA455877

R-PLACE1007409//Homo sapiens mitoxantrone resistance protein 1 mRNA, par

tial sequence//2.4e-113:590:94//Hs.14387:AF093771

R-PLACE1007416//ESTs, Weakly similar to DIPEPTIDYL PEPTIDASE IV [H.sapie

ns] //3.8e-115:579:95//Hs.72165:AI243857

R-PLACE1007450//Human macrophage-derived chemokine precursor (MDC) mRNA,

complete cds//2.7e-38:311:80//Hs.97203:U83171

R-PLACE1007452//EST//2.5e-42:386:77//Hs.140562:AA826514

R-PLACE1007460//ESTs//4.9e-87:434:95//Hs.28472:AI028230

R-PLACE1007478

R-PLACE1007484//ESTs//6.8e-08:64:92//Hs.100251:AA535975

R-PLACE1007488//Dystrophin (muscular dystrophy, Duchenne and Becker type

s), includes DXS142, DXS164, DXS206, DXS230, DXS239, DXS268, DXS269, DXS

270, DXS272//0.26:411:60//Hs.79012:M18533

R-PLACE1007507//ESTs//2.2e-11:136:76//Hs.128815:AA678072

R-PLACE1007511//ESTs, Highly similar to KERATIN, TYPE I CYTOSKELETAL 14

[Homo sapiens] //1.5e-41:261:89//Hs.9029:W57657

R-PLACE1007524//ESTs//5.8e-45:297:87//Hs.154923:AA491377

R-PLACE1007525//Human mRNA for KIAA0118 gene, partial cds//1.9e-44:422:7

5//Hs.154326:D42087

R-PLACE1007544//ESTs//8.4e-59:327:93//Hs.27410:N25612

R-PLACE1007547//EST//0.00010:107:71//Hs.146867:AI161404

R-PLACE1007557//ESTs//1.6e-43:356:79//Hs.44702:AI148840

R-PLACE1007583//ESTs//1.7e-41:214:97//Hs.155071:AA584257

R-PLACE1007598//Homo sapiens clone 23939 mRNA sequence//4.8e-104:554:93/

/Hs.21838:AF038179

R-PLACE1007618//Lymphocyte cytosolic protein 1 (L-plastin)//0.54:161:65/

/Hs.76506:J02923

R-PLACE1007621//Homo sapiens clone 23859 mRNA sequence//4.8e-105:537:94/

/Hs.151046:AF038176

R-PLACE1007632

R-PLACE1007645//ESTs//0.99:187:62//Hs.163453:AI344106

R-PLACE1007649//ESTs//2.2e-108:561:94//Hs.24398:AI262946

R-PLACE1007677//ESTs, Moderately similar to !!!! ALU SUBFAMILY SB2 WARNI

NG ENTRY !!!! [H.sapiens] //9.0e-37:190:97//Hs.23437:AA707331

R-PLACE1007688//ESTs//7.5e-79:409:95//Hs.6166:AI376944

R-PLACE1007690//ESTs, Weakly similar to NADH-UBIQUINONE OXIDOREDUCTASE C

HAIN 5 [Ascaris suum] //3.4e-61:384:89//Hs.92918:AA133274

R-PLACE1007697//ESTs, Highly similar to GCN20 PROTEIN [Saccharomyces ce

revisiae] //1.8e-84:501:88//Hs.91251:U66685

R-PLACE1007705//Human mRNA for apolipoprotein E receptor 2, complete cds

//0.43:307:59//Hs.54481:D86407

R-PLACE1007706//Homo sapiens metalloprotease 1 (MP1) mRNA, complete cds/

/5.7e-75:374:96//Hs.4812:AF061243

R-PLACE1007725//ESTs, Weakly similar to No definition line found [C.eleg

ans] //3.1e-39:253:88//Hs.108797:AA476815

R-PLACE1007729//ESTs//2.7e-44:392:79//Hs.142375:AA398619

R-PLACE1007730//Homo sapiens mRNA for KIAA0685 protein, complete cds//6.

7e-94:556:89//Hs.153121:AB014585

R-PLACE1007737//ESTs//1.1e-41:345:80//Hs.114671:N39322

R-PLACE1007743//ESTs//2.8e-17:98:100//Hs.124258:AA976778

R-PLACE1007746//ESTs//5.3e-69:413:90//Hs.5297:AA156903

R-PLACE1007791//ESTs, Weakly similar to TEICHOIC ACID BIOSYNTHESIS PROTE

IN A [Bacillus subtilis] //8.6e-27:143:98//Hs.144194:AA706337

R-PLACE1007807//Human Line-1 repeat mRNA with 2 open reading frames//9.9

e-45:428:76//Hs.23094:M19503

R-PLACE1007810//ESTs//5.9e-15:143:82//Hs.126257:AI279044

R-PLACE1007829//ESTs//2.2e-22:190:84//Hs.142707:W24050

R-PLACE1007843//ESTs//5.3e-110:556:95//Hs.107287:AI308839

R-PLACE1007846//Human Line-1 repeat mRNA with 2 open reading frames//1.7

e-95:525:91//Hs.23094:M19503

R-PLACE1007852//ESTs//4.5e-14:174:75//Hs.153419:N52017

R-PLACE1007858//Homo sapiens mRNA for KIAA0766 protein, complete cds//2.

1e-111:574:94//Hs.28020:AB018309

R-PLACE1007866//EST//1.8e-48:262:96//Hs.141009:H01178

R-PLACE1007877//ESTs//1.2e-94:478:96//Hs.5999:AI207832

R-PLACE1007897//ESTs//2.3e-92:437:99//Hs.122843:AI189060

R-PLACE1007908//Homo sapiens mRNA, chromosome 1 specific transcript KIAA

0487//2.8e-89:460:95//Hs.92381:AB007956

R-PLACE1007946//ESTs//2.8e-28:172:78//Hs.126784:AA521510

R-PLACE1007954//ESTs//6.1e-72:366:95//Hs.27842:AI217966

R-PLACE1007955//Homo sapiens cyclin-D binding Myb-like protein mRNA, com

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plete cds//3.9e-103:509:96//Hs.5671:AF084530
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R-PLACE1007958//Homo sapiens cAMP-specific phosphodiesterase 8B (PDE8B)

mRNA, partial cds//7.2e-89:465:93//Hs.78106:AF079529

R-PLACE1007969//ESTs, Weakly similar to F35C12.2 [C.elegans] //1.4e-113:5

34:99//Hs.44268:AA455900

R-PLACE1007990//ESTs, Highly similar to DOSAGE COMPENSATION REGULATOR

Drosophila melanogaster]//3.8e-97:493:95//Hs.6141:U69564

R-PLACE1008000//ESTs//0.00013:241:65//Hs.44369:AI206835

R-PLACE1008002//ESTs//2.2e-83:397:98//Hs.28780:AI263612

R-PLACE1008044//ESTs, Moderately similar to NUCLEAR PORE COMPLEX PROTEIN

NUP107 [R.norvegicus] //2.0e-115:575:95//Hs.92395:AA779854

R-PLACE1008045//EST//2.6e-89:465:94//Hs.47374:N51935

R-PLACE1008080//EST//0.27:118:65//Hs.144110:AI054269

R-PLACE1008095//ESTs//5.5e-23:268:73//Hs.152525:AA516469

R-PLACE1008111//ESTs, Weakly similar to oxidoreductase [H.sapiens]//4.4e

-108:537:96//Hs.28877:AI309334

R-PLACE1008122//ESTs//6.5e-103:531:94//Hs.34737:AI028617

R-PLACE1008129//ESTs//0.76:96:66//Hs.65373:AA883511

R-PLACE1008132//ESTs//5.9e-05:113:72//Hs.13014:W26381

R-PLACE1008177//ESTs//7.2e-107:557:93//Hs.132851:AI028266

R-PLACE1008181//ESTs//5.3e-97:473:97//Hs.57483:AA776267

R-PLACE1008198//ESTs//3.9e-16:120:85//Hs.9142:AA662107

R-PLACE1008201//Homo sapiens mRNA for KIAA0530 protein, partial cds//1.6

e-104:551:93//Hs.10801:AB011102

R-PLACE1008209//ESTs//1.2e-72:366:96//Hs.92308:AI052701

R-PLACE1008231//ESTs//1.2e-70:363:94//Hs.25094:R80871

R-PLACE1008244//ESTs//1.3e-98:543:92//Hs.25130:AA218990

R-PLACE1008273//ESTs//6.1e-16:153:79//Hs.115987:AA483808

R-PLACE1008275

R-PLACE1008280//ESTs//1.3e-66:353:94//Hs.156376:AI338705

R-PLACE1008309//ESTs//2.8e-100:511:95//Hs.45080:N49852

R-PLACE1008329//V-myc avian myelocytomatosis viral oncogene homolog//0.5

3:206:62//Hs.79070:K02276

R-PLACE1008330//ESTs, Weakly similar to EOSINOPHIL LYSOPHOSPHOLIPASE [H.

sapiens] //8.6e-79:297:91//Hs.146477:AI128445

R-PLACE1008331//ESTs//0.98:156:62//Hs.108548:AA081656

R-PLACE1008356//Homo sapiens mRNA for KIAA0679 protein, partial cds//2.1

e-99:556:90//Hs.5734:AB014579

R-PLACE1008368//EST//0.0027:198:63//Hs.160868:AI359052

R-PLACE1008369//ESTs//5.4e-28:167:92//Hs.19530:AA480009

R-PLACE1008392//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNIN

G ENTRY !!!! [H.sapiens] //2.0e-41:448:72//Hs.139007:H74314

R-PLACE1008398//ESTs, Highly similar to Mig-6//1.4e-103:529:94//Hs.11169

:AA156242

R-PLACE1008401//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT

RY !!!! [H.sapiens] //1.2e-81:536:87//Hs.7570:W31010

R-PLACE1008402//Homo sapiens mRNA for p115, complete cds//5.1e-103:521:9

5//Hs.7763:D86326

R-PLACE1008405//ESTs//1.2e-89:485:92//Hs.138241:AA767440

R-PLACE1008424//ESTs//6.7e-97:508:93//Hs.6709:A1379778

R-PLACE1008426//ESTs//5.5e-30:174:92//Hs.7946:AA651757

R-PLACE1008429//ESTs//2.1e-12:188:71//Hs.140769:AA931562

R-PLACE1008437//ESTs//7.1e-54:266:98//Hs.13068:AA001928

R-PLACE1008455//ESTs//4.7e-69:471:85//Hs.28337:AA210761

R-PLACE1008457//EST//8.6e-14:202:71//Hs.149887:AI289387

R-PLACE1008465//ESTs//3.8e-80:426:93//Hs.153146:AI299636

R-PLACE1008488//ESTs//7.9e-73:388:94//Hs.97268:AA292180

R-PLACE1008524//ESTs//7.4e-107:545:95//Hs.10441:N62816

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R-PLACE1008531//ESTs//3.8e-68:427:87//Hs.56607:H23560
R-PLACE1008532
R-PLACE1008533//ESTs//2.5e-52:318:88//Hs.7274:AA476850
R-PLACE1008568//ESTs//3.2e-99:486:97//Hs.84414:AI423223
R-PLACE1008584//EST//2.2e-18:154:68//Hs.141498:N50064
R-PLACE1008621//ESTs, Weakly similar to line-1 protein ORF1 [H.sapiens]/
/8.6e-67:483:82//Hs.140416:AA778649
R-PLACE1008625
R-PLACE1008626//ESTs//4.7e-73:372:95//Hs.23491:AA642454
R-PLACE1008627//ESTs//1.6e-90:475:93//Hs.102401:AI004972
R-PLACE1008629//ESTs//8.0e-93:492:93//Hs.20843:AA699512
R-PLACE1008630//ESTs//1.0e-94:453:98//Hs.34840:AI279612
R-PLACE1008643//Human mRNA for KIAA0355 gene, complete cds//2.8e-49:422:
79//Hs.153014:AB002353
R-PLACE1008650//Homo sapiens pleiotropic regulator 1 (PLRG1) mRNA, compl
ete_cds//7.9e-90:434:97//Hs.147967:AF044333
R-PLACE1008693//ISLET AMYLOID POLYPEPTIDE PRECURSOR//1.8e-41:505:71//Hs.
51048:X68830
R-PLACE1008696//Cytochrome P450, subfamily I (aromatic compound-inducibl
e), polypeptide 2//1.7e-51:316:76//Hs.1361:M55053
R-PLACE1008715//EST//0.63:114:64//Hs.121353:AA758600
R-PLACE1008748//ESTs, Weakly similar to !!!! ALU CLASS B WARNING ENTRY !
!!! [H.sapiens] //2.3e-40:281:83//Hs.142209:AA873303
R-PLACE1008757//ESTs//1.4e-45:226:99//Hs.22822:H06408
R-PLACE1008790//ESTs//0.035:67:76//Hs.153554:AI286313
R-PLACE1008798//ESTs//4.9e-59:285:99//Hs.49018:N79930
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R-PLACE1008808//Homo sapiens putative checkpoint control protein HRAD1 m

R-PLACE1008807//ESTs//1.7e-82:413:96//Hs.130745:AA573217

RNA, complete cds//1.1e-98:499:95//Hs.7179:AF011905

### 特平11-248036

R-PLACE1008813//ESTs, Weakly similar to coded for by C. elegans cDNA cm1

0e3 [C.elegans] //4.2e-92:490:93//Hs.110454:H11810

R-PLACE1008851//ESTs//2.4e-84:421:95//Hs.158893:AI378428

R-PLACE1008854

R-PLACE1008867//ESTs//1.1e-77:400:95//Hs.44198:AI093502

R-PLACE1008887//Oxytocin receptor//1.1e-43:601:67//Hs.2820:X64878

R-PLACE1008902//ESTs//0.023:208:61//Hs.154164:AI246893

R-PLACE1008920//Homo sapiens mRNA for KIAA0765 protein, partial cds//2.6

e-56:344:89//Hs.62318:AB018308

R-PLACE1008925//ESTs//0.17:294:57//Hs.105113:AA457018

R-PLACE1008934//ESTs//2.0e-61:339:92//Hs.100448:AA622653

R-PLACE1008941//ESTs, Moderately similar to ATP-BINDING CASSETTE TRANSP

ORTER 2 [Mus musculus] //1.3e-19:488:63//Hs.15780:U66680

R-PLACE1008947//ESTs//1.3e-81:385:99//Hs.71574:AI376573

R-PLACE1009020//ESTs//2.9e-79:419:94//Hs.121816:AA775419

R-PLACE1009027//Homo sapiens mRNA for doublecortin//3.1e-82:434:94//Hs.3

4780: AJ003112

R-PLACE1009039//ESTs//2.8e-83:448:92//Hs.129179:AA988520

R-PLACE1009045//ESTs//1.6e-64:318:97//Hs.103423:AA814195

R-PLACE1009048//ESTs//2.7e-17:403:63//Hs.149343:AI249139

R-PLACE1009050//ESTs//2.0e-88:475:92//Hs.122925:AA909008

R-PLACE1009060//ESTs, Highly similar to HYPOTHETICAL 98.3 KD PROTEIN R1

OE12.1 IN CHROMOSOME III [Caenorhabditis elegans] //1.2e-112:555:96//Hs.9

663: AA527142

R-PLACE1009090//ESTs//5.0e-13:175:75//Hs.140608:N53448

R-PLACE1009094//Human splicing factor SRp30c mRNA, complete cds//0.98:16

1:63//Hs.77608:AL021546

R-PLACE1009099//ESTs, Highly similar to MKR2 PROTEIN [Mus musculus] //0.

037:63:84//Hs.39943:AA203136

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R-PLACE1009110//EST//5.8e-17:307:65//Hs.117264:AA682549
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R-PLACE1009111//ESTs//1.9e-57:349:90//Hs.11260:N98983

R-PLACE1009130//ESTs, Weakly similar to hypothetical protein 2 [H.sapien

s]//6.5e-97:501:94//Hs.11123:AA703945

R-PLACE1009150//LAMIN B1//0.064:393:60//Hs.89497:L37747

R-PLACE1009155//ESTs, Moderately similar to ovarian-specific protein [R.

norvegicus]//2.5e-36:163:82//Hs.93332:AA811920

R-PLACE1009158//ESTs//0.30:149:65//Hs.155796:R80005

R-PLACE1009166//ESTs//3.3e-34:292:77//Hs.140255:AA708322

R-PLACE1009172//EST//8.9e-21:364:67//Hs.142557:AA464948

R-PLACE1009174//ESTs//2.9e-18:274:70//Hs.139241:AA283707

R-PLACE1009183//ESTs//2.3e-44:297:87//Hs.136839:H93717

R-PLACE1009186//ESTs, Weakly similar to No definition line found [C.eleg

ans] //1.5e-109:572:94//Hs.54943:Z78396

R-PLACE1009190//ESTs//2.6e-53:318:90//Hs.25245:AA176701

R-PLACE1009200//H.sapiens mRNA for sortilin//3.2e-33:195:92//Hs.104247:X

98248

R-PLACE1009230//ESTs//3.0e-31:153:92//Hs.124116:AA772680

R-PLACE1009246//ESTs//2.7e-90:488:92//Hs.10706:AA909018

R-PLACE1009308//ESTs//0.022:46:97//Hs.36545:AA075423

R-PLACE1009319//ESTs//7.7e-99:533:92//Hs.109654:N91279

R-PLACE1009328//Human Line-1 repeat mRNA with 2 open reading frames//7.3

e-82:578:82//Hs.23094:M19503

R-PLACE1009335//EST//1.3e-64:311:99//Hs.130558:AI004397

R-PLACE1009338//ESTs//6.0e-70:386:93//Hs.3542:AI015782

R-PLACE1009368//ESTs//1.4e-18:107:98//Hs.133303:W04760

R-PLACE1009375//ESTs//8.9e-36:313:76//Hs.24608:AA161260

R-PLACE1009388//EST//4.4e-11:101:83//Hs.147074:AI188883

R-PLACE1009398//ESTs//5.7e-63:335:93//Hs.149003:AI243186

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R-PLACE1009404//ESTs//3.6e-94:452:98//Hs.103177:W72798
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R-PLACE1009410//ESTs//2.2e-112:553:96//Hs.61779:AA195255

R-PLACE1009434//EST//3.4e-15:109:74//Hs.103742:U48632

R-PLACE1009443//EST//7.5e-61:302:98//Hs.157787:AI361269

R-PLACE1009444//PHOSPHATIDYLINOSITOL 4-KINASE ALPHA//6.6e-85:479:90//Hs.

76987:AF012872

R-PLACE1009459//ESTs//9.3e-86:437:95//Hs.104871:AI161427

R-PLACE1009476//Homo sapiens Chromosome 16 BAC clone CIT987SK-A-67A1//1.

3e-42:266:89//Hs.155049:AC004531

R-PLACE1009477//ESTs//2.0e-50:367:82//Hs.152788:AA630925

R-PLACE1009493//ESTs//4.5e-14:150:78//Hs.143918:AA699596

R-PLACE1009524//ESTs//2.9e-97:454:99//Hs.7189:AA767698

R-PLACE1009539//ESTs//9.1e-94:454:97//Hs.154706:AI262131

R-PLACE1009542//Homo sapiens apoptotic protease activating factor 1 (Apa

f-1) mRNA, complete cds//1.4e-10:289:63//Hs.77579:AF013263

R-PLACE1009571//ESTs//2.1e-23:125:100//Hs.41767:AA732326

R-PLACE1009581//ESTs, Weakly similar to FIBRINOGEN ALPHA AND ALPHA-E CHA

IN PRECURSORS [H.sapiens] //0.0012:56:91//Hs.12151:AA001818

R-PLACE1009595//Homo sapiens mRNA for KIAA0635 protein, complete cds//6.

0e-42:547:70//Hs.69157:AB014535

R-PLACE1009596//ESTs//1.9e-102:588:90//Hs.142395:AI374735

R-PLACE1009607//ESTs//0.0093:107:70//Hs.70932:AA126482

R-PLACE1009613//ESTs//7.5e-101:488:97//Hs.5905:AA946680

R-PLACE1009621//EST//0.99:261:60//Hs.149030:AI243338

R-PLACE1009622//ESTs//8.0e-93:508:92//Hs.20967:AI422858

R-PLACE1009637//EST//8.7e-90:442:97//Hs.121372:AA758701

R-PLACE1009639//EST//8.5e-49:279:93//Hs.117447:R27213

R-PLACE1009659//Homo sapiens mRNA for KIAA0587 protein, complete cds//3.

3e-109:589:92//Hs.21862:AB011159

R-PLACE1009665//ESTs, Weakly similar to line-1 protein ORF1 [H.sapiens]/ /9.9e-62:483:79//Hs.140416:AA778649

R-PLACE1009670//Homo sapiens genethonin 1 mRNA, complete cds//6.6e-63:31 0:97//Hs.109590:AF062534

R-PLACE1009708//ESTs//3.0e-94:471:96//Hs.40091:N48582

R-PLACE1009721//ESTs, Weakly similar to MSF1 PROTEIN [S.cerevisiae] //4.2 e-98:529:92//Hs.3945:AA004210

R-PLACE1009731//ESTs, Weakly similar to immune associated protein 38 [M. musculus] //6.8e-85:489:89//Hs.26194:AA033989

R-PLACE1009763//Homo sapiens UBA3 (UBA3) mRNA, complete cds//2.0e-117:59 8:95//Hs.154320:AF046024

R-PLACE1009794//ESTs//7.9e-102:529:95//Hs.42927:N20989

R-PLACE1009798//Human DNA sequence from clone 1189B24 on chromosome Xq25-26.3. Contains NADH-Ubiquinone Oxidoreductase MLRQ subunit (EC 1.6.5.3, EC 1.6.99.3, CI-MLRQ), Tubulin Beta and Proto-oncogene Tyrosine-protein Kinase FER (EC 2.7.1.112, P94-FER, C-FER, TYK3) pseudogenes, and part of a novel gene similar to hypothetical proteins S. pombe C22F3.14C and C elegans C16A3.8. Contains ESTs and GSSs//1.1e-113:549:97//Hs.16411:AL0 30996

R-PLACE1009845//ESTs//9.5e-106:560:93//Hs.117751:AI056868

R-PLACE1009879//ESTs//1.8e-61:399:86//Hs.141012:R68748

R-PLACE1009886//EST//0.54:153:64//Hs.144281:AA081328

R-PLACE1009888//ESTs//2.7e-105:520:97//Hs.108646:AA613031

R-PLACE1009908//ESTs, Weakly similar to similar to mouse MMR1 [C.elegans]//1.6e-114:594:94//Hs.67466:AI219740

R-PLACE1009921//ESTs//7.6e-05:291:60//Hs.124786:AA825563

R-PLACE1009924//EST//1.2e-42:216:98//Hs.31742:H20276

R-PLACE1009925//ESTs//5.4e-30:154:100//Hs.114605:AI304317

R-PLACE1009935//ESTs//1.4e-83:417:97//Hs.131755:AA496543

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R-PLACE1009947//Keratin 9//1.0:273:61//Hs.2783:Z29074
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R-PLACE1009971//ESTs//1.5e-87:424:98//Hs.13781:AI160540

R-PLACE1009992//ESTs//1.3e-87:531:87//Hs.55044:AA460698

R-PLACE1009995//ESTs//1.3e-103:575:91//Hs.71218:C75347

R-PLACE1009997//Small inducible cytokine A5 (RANTES)//1.1e-42:286:86//Hs .155464:AF088219

R-PLACE1010023//ESTs, Weakly similar to C27F2.7 gene product [C.elegans] //1.7e-17:137:86//Hs.7049:AI141736

R-PLACE1010031//ESTs//0.22:191:62//Hs.127787:AA832204

R-PLACE1010053//ESTs, Moderately similar to spermatid perinuclear RNA-bi nding protein Spnr [M.musculus] //7.6e-104:546:94//Hs.8215:AA521150

R-PLACE1010069//ESTs//0.99:173:59//Hs.21415:AI150905

R-PLACE1010074//Homo sapiens sorting nexin 2 (SNX2) mRNA, complete cds//

1.5e-88:543:88//Hs.11183:AF065482

R-PLACE1010076//ESTs//3.4e-106:530:95//Hs.28005:AA604375

R-PLACE1010083//ESTs//4.1e-65:395:88//Hs.6103:AA496424

R-PLACE1010089//ESTs//1.6e-70:348:97//Hs.9011:AA418615

R-PLACE1010096//ESTs, Highly similar to hypothetical protein, 100K [R.no rvegicus] //2.8e-104:565:92//Hs.11469:U69567

R-PLACE1010102//ESTs//7.7e-50:311:89//Hs.5518:AI052015

R-PLACE1010105//ESTs//6.0e-94:483:94//Hs.62684:AA806103

R-PLACE1010106//ESTs, Weakly similar to putative p150 [H.sapiens]//1.6e-107:575:93//Hs.48301:AA122270

R-PLACE1010134//EST//8.5e-59:314:94//Hs.135005:AI095130

R-PLACE1010148//A-KINASE ANCHOR PROTEIN 79//0.52:351:56//Hs.48714:M90359

R-PLACE1010152//ESTs//1.9e-40:240:90//Hs.17054:AI139897

R-PLACE1010181//ESTs//3.6e-64:307:99//Hs.154163:AJ003313

R-PLACE1010194//ESTs//2.7e-70:366:96//Hs.5301:T58466

R-PLACE1010202//ESTs//0.57:120:67//Hs.58873:W95037

#### R-PLACE1010231

R-PLACE1010261//EST//6.9e-50:251:98//Hs.148208:AA897478

R-PLACE1010270//ESTs//1.9e-87:430:96//Hs.25252:A1079545

R-PLACE1010274//ESTs//1.9e-57:439:81//Hs.30078:H04535

R-PLACE1010293//ESTs//8.1e-41:310:81//Hs.146811:AA410788

R-PLACE1010321//ESTs//5.7e-50:246:99//Hs.151445:AA351081

R-PLACE1010324//ESTs//0.00025:377:60//Hs.97430:AA398568

R-PLACE1010329//Small inducible cytokine A5 (RANTES)//2.4e-40:300:82//Hs .155464:AF088219

R-PLACE1010341//EST, Moderately similar to !!!! ALU SUBFAMILY SQ WARNING

ENTRY !!!! [H.sapiens] //9.9e-32:190:77//Hs.152369:AA504818

R-PLACE1010362//ESTs//8.2e-86:404:99//Hs.25625:AA669327

R-PLACE1010364//ESTs//1.5e-105:556:93//Hs.12229:AA149594

R-PLACE1010383//Homo sapiens mRNA for putative lipoic acid synthetase, p

artial//4.9e-35:166:86//Hs.53531:AJ224162

R-PLACE1010401//ESTs//2.3e-85:450:93//Hs.23193:AA418152

R-PLACE1010481//ESTs//0.012:280:59//Hs.5579:AI392816

R-PLACE1010491//Homo sapiens Cre binding protein-like 2 mRNA, complete c

ds//2.4e-89:438:96//Hs.13313:AF039081

R-PLACE1010492

R-PLACE1010522//EST//0.43:82:68//Hs.89303:AA284031

R-PLACE1010547//ESTs//3.4e-36:228:89//Hs.128724:AA215455

R-PLACE1010562//ESTs//4.8e-68:408:90//Hs.17244:W86306

R-PLACE1010579//EST//0.015:193:63//Hs.67093:C14033

R-PLACE1010580//ESTs//2.4e-93:445:98//Hs.127325:AA234116

R-PLACE1010599

R-PLACE1010616//ESTs//2.9e-101:497:97//Hs.142197:AA573418

R-PLACE1010622//ESTs//7.1e-23:157:91//Hs.159877:N57895

R-PLACE1010624//ESTs//1.4e-89:428:98//Hs.116561:AA658475

R-PLACE1010628//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT

RY !!!! [H.sapiens] //6.4e-74:391:95//Hs.163495:W57637

R-PLACE1010629//ESTs//5.8e-75:359:99//Hs.123630:AI250805

R-PLACE1010630//ESTs//9.5e-101:519:94//Hs.77873:AA731719

R-PLACE1010631//Homo sapiens mRNA for KIAA0530 protein, partial cds//8.3 e-94:497:93//Hs.10801:AB011102

R-PLACE1010661//ESTs, Highly similar to TESTIS-SPECIFIC PROTEIN PBS13 [
Mus musculus] //4.8e-83:467:91//Hs.22383:R51067

R-PLACE1010662//ESTs, Weakly similar to UDP-GLUCOSE:GLYCOPROTEIN GLUCOSY LTRANSFERASE PRECURSOR [D.melanogaster] //8.3e-103:538:94//Hs.105794:AA70 1659

R-PLACE1010702//Homo sapiens DNA from chromosome 19, BAC 33152//4.8e-46: 531:71//Hs.55452:AC003973

R-PLACE1010714//Human organic anion transporting polypeptide (OATP) mRNA, complete cds//0.0074:351:60//Hs.46440:U21943

R-PLACE1010720//Homo sapiens chromosome-associated protein-C (hCAP-C) mR NA, partial cds//1.2e-56:300:95//Hs.50758:AF092564

R-PLACE1010739//Homo sapiens mRNA for oligophrenin 1//2.6e-84:501:88//Hs .158122:AJ001189

R-PLACE1010743

R-PLACE1010761//Homo sapiens okadaic acid-inducible phosphoprotein (OA48 -18) mRNA, complete cds//5.2e-94:442:96//Hs.3688:AF069250

R-PLACE1010771//ESTs//3.8e-54:264:99//Hs.27299:AI074024

R-PLACE1010786//ESTs, Highly similar to MYOSIN HEAVY CHAIN IB [Acantham oeba castellanii] //7.6e-111:575:94//Hs.10260:AI126627

R-PLACE1010800//ESTs//1.9e-109:557:95//Hs.11460:AA057558

R-PLACE1010802//ESTs//0.00021:428:58//Hs.70258:AI091203

R-PLACE1010811//ESTs//7.4e-73:394:93//Hs.48499:AA428896

R-PLACE1010833//ESTs//9.0e-33:274:78//Hs.24391:W27472

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R-PLACE1010856//ESTs//5.8e-41:351:81//Hs.17401:W81048
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R-PLACE1010857//ESTs, Weakly similar to T14B4.2 gene product [C.elegans]

//1.4e-71:326:92//Hs.3385:N25917

R-PLACE1010870//ESTs//5.8e-57:303:96//Hs.30503:H05090

R-PLACE1010877//Homo sapiens mRNA for KIAA0610 protein, partial cds//2.3

e-101:501:96//Hs.118087:AB011182

R-PLACE1010891

R-PLACE1010896//EST//0.0039:249:57//Hs.126090:AA867983

R-PLACE1010900//Human Xq28 mRNA, complete cds//3.3e-07:106:76//Hs.20136: U46023

R-PLACE1010916//Plasminogen activator inhibitor, type II (arginine-serpi

n)//0.25:190:61//Hs.75716:Y00630

R-PLACE1010917//ESTs//1.3e-82:452:92//Hs.68055:AA081093

R-PLACE1010925//ESTs//1.1e-92:471:95//Hs.17448:AI125479

R-PLACE1010926//Homo sapiens mRNA for KIAA0554 protein, partial cds//1.3

e-66:402:89//Hs.74750:AB011126

R-PLACE1010942//Homo sapiens intersectin short form mRNA, complete cds//

8.9e-82:441:93//Hs.66392:AF064244

R-PLACE1010944

R-PLACE1010947//ESTs//6.7e-15:102:91//Hs.116808:AA211519

R-PLACE1010954//Small inducible cytokine A5 (RANTES)//8.8e-51:278:93//Hs

.155464:AF088219

R-PLACE1010960//ESTs, Highly similar to ACTIN-LIKE PROTEIN 13E [Drosoph

ila melanogaster]//1.0e-103:565:92//Hs.23259:AA532437

R-PLACE1010965//EST//6.3e-80:447:91//Hs.139529:AA219580

R-PLACE1011026//ESTs//4.6e-99:463:99//Hs.149732:AI199846

R-PLACE1011032//ESTs//6.3e-56:295:94//Hs.143576:AI147867

R-PLACE1011041//ESTs//5.3e-27:168:91//Hs.7936:AA923249

R-PLACE1011046//Homo sapiens mRNA for KIAA0581 protein, partial cds//9.4

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e-102:563:91//Hs.41143:AB011153
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R-PLACE1011054//EST//1.1e-15:245:69//Hs.112648:AA609135

R-PLACE1011056//Small inducible cytokine A5 (RANTES)//3.5e-38:285:82//Hs .155464:AF088219

R-PLACE1011057//ESTs//3.5e-81:410:96//Hs.96499:AA252537

R-PLACE1011090//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT

RY !!!! [H.sapiens] //1.6e-54:398:84//Hs.108740:W20094

R-PLACE1011109//EST//1.3e-48:321:85//Hs.146794:AI149478

R-PLACE1011114//ESTs//5.4e-90:475:94//Hs.69331:AA099587

R-PLACE1011133//ESTs, Highly similar to 40 KD PROTEIN [Borna disease vi

rus]//3.0e-105:552:93//Hs.31257:AA875998

R-PLACE1011143//ESTs//0.40:127:65//Hs.118701:AA420795

R-PLACE1011160//Homa sapiens mRNA for HRIHFB2038, partial cds//7.7e-97:5

34:91//Hs.28719:AB015333

R-PLACE1011165//ESTs//1.0:135:69//Hs.32163:AI374673

R-PLACE1011185//ESTs, Weakly similar to !!!! ALU CLASS B WARNING ENTRY!

!!! [H.sapiens] //3.4e-85:442:95//Hs.136910:AA810782

R-PLACE1011203//EST//0.0047:268:60//Hs.68832:AA088438

R-PLACE1011219//ESTs//7.6e-96:504:93//Hs.124834:AI138671

R-PLACE1011221//ESTs//5.2e-23:241:78//Hs.26761:AA203299

R-PLACE1011229//ESTs//1.9e-90:461:95//Hs.132288:AI027693

R-PLACE1011263//ESTs//6.6e-56:321:93//Hs.158787:W79602

R-PLACE1011273//ESTs//0.016:131:65//Hs.140466:AA766772

R-PLACE1011291//EST//8.7e-47:267:91//Hs.158806:AI376913

R-PLACE1011296//EST//2.7e-38:225:92//Hs.160934:AI376849

R-PLACE1011310//ESTs//9.1e-37:196:96//Hs.39328:H71807

R-PLACE1011325//Human clone 23721 mRNA sequence//0.0012:486:58//Hs.83572

:U79291

R-PLACE1011332//ESTs//8.4e-44:217:99//Hs.101365:R60578

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R-PLACE1011340//ESTs, Weakly similar to TEICHOIC ACID BIOSYNTHESIS PROTE
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IN A [Bacillus subtilis] //3.4e-92:452:97//Hs.144194:AA706337

R-PLACE1011375//ESTs//2.2e-35:195:96//Hs.106486:H11376

R-PLACE1011399//ESTs//0.00096:224:67//Hs.151643:AA001194

R-PLACE1011419//ESTs//4.9e-50:267:95//Hs.7045:AA167337

R-PLACE1011433//Homo sapiens mRNA for KIAA0530 protein, partial cds//4.8

e-114:600:94//Hs.10801:AB011102

R-PLACE1011452//Homo sapiens mRNA for KIAA0707 protein, partial cds//3.7

e-32:310:76//Hs.138488:AB014607

R-PLACE1011465//ESTs//4.5e-86:471:93//Hs.144519:R70887

R-PLACE1011472//Homo sapiens mRNA for KIAA0712 protein, complete cds//2.

6e-104:515:96//Hs.111138:AB018255

R-PLACE1011492//ESTs//1.7e-96:488:95//Hs.116555:AA639278

R-PLACE1011503//Homo sapiens clone 23597 mRNA sequence//1.0:193:60//Hs.2

8197: AF035294

R-PLACE1011520//ESTs//6.8e-99:477:97//Hs.85077:AA968576

R-PLACE1011563//ESTs//1.4e-94:514:92//Hs.16471:AA206421

R-PLACE1011567//EST//2.8e-89:417:100//Hs:149770:AI285985

R-PLACE1011576//Zinc finger protein 91 (HPF7, HTF10)//4.7e-55:267:81//Hs

.8597:L11672

R-PLACE1011586//Myosin, heavy polypeptide 11, smooth muscle//0.98:168:61

//Hs.78344:AF001548

R-PLACE1011635//ESTs//2.5e-67:332:98//Hs.108194:AA780067

R-PLACE1011641//ESTs//2.5e-71:338:100//Hs.153085:AA993965

R-PLACE1011643//EST//1.9e-18:181:78//Hs.160879:AI361900

R-PLACE1011649//Homo sapiens clone 24432 mRNA sequence//2.5e-73:414:91//

Hs.78019:AF070535

R-PLACE1011650//EST//5.8e-18:118:92//Hs.124486:AA846036

R-PLACE1011664//Restin (Reed-Steinberg cell-expressed intermediate filam

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ent-associated protein)//0.50:178:62//Hs.31638:X64838
R-PLACE1011675
R-PLACE1011682//ESTs//2.4e-90:465:94//Hs.57830:AI312025
R-PLACE1011719//Human Line-1 repeat mRNA with 2 open reading frames//8.5
e-57:410:83//Hs.23094:M19503
R-PLACE1011725//ESTs//2.0e-70:340:98//Hs.161725:AA251392
R-PLACE1011729//ESTs//7.5e-19:180:79//Hs.119516:AA443426
R-PLACE1011749//Myelin oligodendrocyte glycoprotein {alternative product
s} //7.3e-40:361:77//Hs.53217:Z48051
R-PLACE1011762//Human kpni repeat mrna (cdna clone pcd-kpni-8), 3' end//
3.0e-60:319:76//Hs.103948:K00627
R-PLACE1011778//ESTs//8.0e-70:372:94//Hs.46765:AA521080
R-PLACE1011783//Calcium modulating ligand//8.4e-41:279:85//Hs.13572:AF06
8179
R-PLACE1011858//ESTs//2.6e-69:396:91//Hs.55220:D11563
R-PLACE1011874//Human mRNA for KIAA0033 gene, partial cds//1.2e-53:439:8
0//Hs.22271:D26067
R-PLACE1011875//ESTs//9.0e-88:420:98//Hs.70897:AA987648
R-PLACE1011891//ESTs//3.9e-17:97:100//Hs.84698:AA725913
R-PLACE1011896//ESTs//2.8e-23:176:84//Hs.121540:A1275497
R-PLACE1011922//ESTs//6.6e-35:415:73//Hs.10972:AA164268
R-PLACE1011923//Homo sapiens serum-inducible kinase mRNA, complete cds//
2.3e-99:546:92//Hs.3838:AF059617
R-PLACE1011962//ESTs//3.3e-49:294:90//Hs.106800:AI031969
R-PLACE1011964//ESTs, Weakly similar to LINE-1 REVERSE TRANSCRIPTASE HOM
OLOG [H.sapiens] //2.6e-06:284:63//Hs.124102:AA701285
R-PLACE1011982//ESTs//2.9e-51:291:93//Hs.20792:R14890
R-PLACE1011995//ESTs//4.5e-39:304:81//Hs.138852:AA284247
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R-PLACE1012031//Homo sapiens mRNA for KIAA0713 protein, partial cds//8.0

e-106:540:95//Hs.88756:AB018256

R-PLACE2000003//ESTs//2.0e-103:488:98//Hs.8341:AA490069

R-PLACE2000007//ESTs//2.4e-110:564:95//Hs.65135:W89120

R-PLACE2000011//Homo sapiens clone 614 unknown mRNA, complete sequence//

4.8e-105:524:95//Hs.21811:AF091080

R-PLACE2000015//ESTs//7.1e-111:543:96//Hs.32178:AA083211

R-PLACE2000017//EST//8.2e-46:404:79//Hs.133006:AI049504

R-PLACE2000021//EST//4.5e-19:221:71//Hs.150830:AI302868

R-PLACE2000033//Human melanoma antigen recognized by T-cells (MART-1) mR

NA//1.6e-43:355:79//Hs.154069:U06452

R-PLACE2000034//ESTs//2.2e-21:314:70//Hs.107697:W29013

R-PLACE2000039//H.sapiens mRNA for translin associated protein X//2.9e-4

5:514:72//Hs.96247:X95073

R-PLACE2000047//Homo sapiens class-I MHC-restricted T cell associated mo

lecule (CRTAM) mRNA, complete cds//4.1e-45:358:81//Hs.159523:AF001622

R-PLACE2000050//ESTs//4.5e-65:322:98//Hs.155820:N67652

R-PLACE2000061//Homo sapiens mRNA for KIAA0575 protein, complete cds//9.

2e-41:429:72//Hs.153468:AB011147

R-PLACE2000062//Human mRNA for KIAA0392 gene, partial cds//2.0e-43:296:8

6//Hs.40100:AB002390

R-PLACE2000072//Homo sapiens ZNF202 alpha (ZNF202) mRNA, complete cds//6

.2e-111:550:95//Hs.9443:AF027219

R-PLACE2000097//Calcium modulating ligand//6.2e-47:372:80//Hs.13572:AF06

8179

R-PLACE2000100//ESTs//8.8e-42:281:86//Hs.150727:AI292236

R-PLACE2000103//ESTs//4.7e-97:518:93//Hs.118727:W26941

R-PLACE2000111//Homo sapiens ubiquitin hydrolyzing enzyme I (UBH1) mRNA,

partial cds//0.00043:127:71//Hs.42400:AF022789

R-PLACE2000115//ESTs//7.8e-93:458:96//Hs.104520:AA481662

R-PLACE2000132//ESTs//3.8e-69:409:91//Hs.98502:AA433988

R-PLACE2000136//ESTs//6.2e-05:274:61//Hs.114067:AA701558

R-PLACE2000140//Homo sapiens mRNA for KIAA0562 protein, complete cds//4.

7e-44:302:85//Hs.118401:AB011134

R-PLACE2000164//ESTs//6.3e-106:506:98//Hs.16390:AI052357

R-PLACE2000170//Small inducible cytokine A5 (RANTES)//3.7e-42:326:79//Hs .155464:AF088219

R-PLACE2000172//ESTs//9.6e-43:232:94//Hs.6709:AI379778

R-PLACE2000176//EST//1.6e-24:154:91//Hs.157734:AI360292

R-PLACE2000187//Human mRNA for KIAA0033 gene, partial cds//2.0e-49:292:9

0//Hs.22271:D26067

R-PLACE2000216//ESTs//0.0041:166:64//Hs.159476:AI382378

R-PLACE2000223//ESTs//0.49:171:60//Hs.86154:AA207191

R-PLACE2000235//ESTs//2.9e-39:264:85//Hs.136839:H93717

R-PLACE2000246//NAD(P)H:menadione oxidoreductase//4.0e-44:331:82//Hs.807

06:M81600

R-PLACE2000264//Human mRNA for KIAA0365 gene, partial cds//4.0e-38:311:8

1//Hs.84123:AB002363

R-PLACE2000274//ESTs, Weakly similar to dynein-related protein [H.sapien

s]//1.9e-87:422:98//Hs.9740:AI004779

R-PLACE2000302//ESTs, Highly similar to THREONYL-TRNA SYNTHETASE, CYTOP

LASMIC [Homo sapiens] //4.8e-68:380:92//Hs.107365:AA720664

R-PLACE2000305//ESTs//2.6e-43:413:75//Hs.118732:AI344055

R-PLACE2000317//ESTs//2.8e-92:501:92//Hs.28432:R83380

R-PLACE2000335//ESTs//4.3e-32:300:77//Hs.163035:AA748058

R-PLACE2000342//Homo sapiens ubiquitin hydrolyzing enzyme I (UBH1) mRNA,

partial cds//0.00071:117:73//Hs.42400:AF022789

R-PLACE2000347//ESTs//1.6e-30:214:86//Hs.135272:AI347618

R-PLACE2000359//Zinc finger protein 139 (clone pHZ-37)//5.5e-42:288:86//

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Hs.140090:U09848
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R-PLACE2000366//Thromboxane A2 receptor//6.7e-53:392:82//Hs.89887:D38081

R-PLACE2000371//ESTs//3.6e-81:409:97//Hs.155138:AA158731

R-PLACE2000373//Homo sapiens mRNA for KIAA0734 protein, partial cds//0.8

9:186:62//Hs.101516:AB018277

R-PLACE2000379//ESTs//3.4e-10:228:64//Hs.57842:W63781

R-PLACE2000394//ESTs//6.7e-41:462:74//Hs.107657:AA126814

R-PLACE2000398//ESTs//4.2e-33:373:74//Hs.155184:AA573189

R-PLACE2000399

R-PLACE2000404//ESTs, Highly similar to LEUCYL-TRNA SYNTHETASE, CYTOPLA

SMIC [Saccharomyces cerevisiae] //4.2e-109:540:96//Hs.6762:AA088424

R-PLACE2000411//ESTs//1.6e-89:459:95//Hs.117589:N25941

R-PLACE2000419//ESTs, Weakly similar to F25H9.6 [C.elegans]//1.6e-97:436

:95//Hs.24647:W19739

R-PLACE2000425//Homo sapiens DEC-205 mRNA, complete cds//2.2e-44:287:88/

/Hs.153563:AF011333

R-PLACE2000427//ESTs, Weakly similar to coded for by C. elegans cDNA CEE

SI42F [C.elegans] //3.0e-113:543:97//Hs.16933:AA976002

R-PLACE2000433//ESTs//1.8e-46:311:85//Hs.145032:AA343523

R-PLACE2000435//ESTs//2.9e-33:243:87//Hs.90964:AA393986

R-PLACE2000438//ESTs//2.8e-09:66:96//Hs.59548:AI279887

R-PLACE2000450//Human mRNA for KIAA0392 gene, partial cds//3.3e-39:394:7

4//Hs.40100:AB002390

R-PLACE2000455//ESTs//1.2e-62:301:99//Hs.151708:AA554714

R-PLACE2000458//ESTs//6.8e-92:473:96//Hs.115897:AA156638

R-PLACE2000465//ESTs//1.3e-45:435:76//Hs.141635:N79228

R-PLACE2000477//ESTs//2.6e-100:536:94//Hs.77822:AA532642

R-PLACE3000004//ESTs//9.1e-114:558:97//Hs.13035:AA151838

R-PLACE3000029//Homo sapiens mRNA for KIAA0575 protein, complete cds//6.

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3e-64:350:86//Hs.153468:AB011147
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R-PLACE3000059//EST//0.028:175:61//Hs.159873:R92763

R-PLACE3000070//ESTs//3.8e-16:200:74//Hs.138771:N70979

R-PLACE3000103//ISLET AMYLOID POLYPEPTIDE PRECURSOR//3.7e-48:468:75//Hs.

51048:X68830

R-PLACE3000119//ESTs//1.2e-45:330:83//Hs.35254:AI133727

R-PLACE3000124//EST//3.1e-75:391:96//Hs.161515:N71739

R-PLACE3000136//ESTs//8.3e-18:152:84//Hs.10043:D81792

R-PLACE3000142//ESTs//0.047:183:62//Hs.43102:AA131369

R-PLACE3000147//ESTs//6.6e-53:310:90//Hs.8230:W07142

R-PLACE3000148//EST//1.9e-16:184:76//Hs.146570:AI139815

R-PLACE3000155//ESTs//1.2e-19:192:79//Hs.131350:AA805223

R-PLACE3000156//ESTs, Highly similar to ENV POLYPROTEIN [Avian spleen n

ecrosis virus] //4.8e-36:262:88//Hs.31532:H18272

R-PLACE3000157

R-PLACE3000158//Small inducible cytokine A5 (RANTES)//8.2e-39:296:81//Hs .155464:AF088219

R-PLACE3000160

R-PLACE3000169//ESTs//1.5e-64:329:97//Hs.129864:R20798

R-PLACE3000194

R-PLACE3000197//ESTs//1.4e-38:197:98//Hs.146341:AI269930

R-PLACE3000199//ESTs, Highly similar to APOLIPOPROTEIN E PRECURSOR [Susscrofa] //0.018:261:61//Hs.131370:AA927516

R-PLACE3000207//EST//1.3e-15:154:78//Hs.136617:AA630476

R-PLACE3000208//ESTs//1.6e-18:151:82//Hs.155498:W27084

R-PLACE3000218//ESTs//1.8e-85:463:93//Hs.7849:AI129964

R-PLACE3000220//ESTs//6.4e-44:308:84//Hs.136839:H93717

R-PLACE3000226//ESTs//1.3e-49:269:95//Hs.9059:AI359014

R-PLACE3000230//EST//2.3e-34:258:83//Hs.4382:T02878

R-PLACE3000242//Human trophinin mRNA, complete cds//1.1e-63:546:78//Hs.76313:U04811

R-PLACE3000244//ESTs, Highly similar to NEGATIVE REGULATOR OF MITOSIS [Emericella nidulans] //7.5e-110:549:95//Hs.13692:AA632002

R-PLACE3000254//Human mRNA for KIAA0309 gene, partial cds//2.4e-29:174:9 4//Hs.87908:AB002307

R-PLACE3000271//Human macrophage-derived chemokine precursor (MDC) mRNA, complete cds//2.3e-62:287:82//Hs.97203:U83171

R-PLACE3000276//ESTs//7.5e-07:187:64//Hs.80720:AA031782

R-PLACE3000304//Human 53K isoform of Type II phosphatidylinositol-4-phosphate 5-kinase (PIPK) mRNA, complete cds//4.0e-59:456:80//Hs.108966:U486

R-PLACE3000310//ISLET AMYLOID POLYPEPTIDE PRECURSOR//6.0e-45:302:86//Hs.

51048:X68830

R-PLACE3000320//Interleukin 10//9.6e-42:288:85//Hs.2180:M57627

R-PLACE3000322//ESTs, Highly similar to ARGININOSUCCINATE LYASE [Homo sapiens] //5.8e-34:190:95//Hs.114531:N74103

R-PLACE3000331//Homo sapiens mRNA for KIAA0772 protein, complete cds//3.

7e-32:239:84//Hs.15519:AB018315

R-PLACE3000339//ESTs//1.3e-109:548:96//Hs.7871:AI041837

R-PLACE3000341//EST//1.1e-11:231:68//Hs.131328:AA922688

R-PLACE3000350//Human mRNa for adipogenesis inhibitory factor//8.0e-40:2

91:76//Hs.1721:X58377

R-PLACE3000352//EST//1.8e-72:343:100//Hs.144871:AI202380

R-PLACE3000353//ESTs//2.0e-75:395:95//Hs.107260:W52683

R-PLACE3000362//EST//2.8e-80:381:99//Hs.136233:AA261888

R-PLACE3000363

R-PLACE3000365//EST//4.8e-50:307:88//Hs.149580:A1281881

R-PLACE3000373//ESTs//5.8e-60:422:83//Hs.142826:W87430

R-PLACE3000388//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING

ENTRY !!!! [H.sapiens] //1.0e-35:427:73//Hs.138795:R98534

R-PLACE3000399//ESTs//6.5e-05:162:66//Hs.149440:AI274570

R-PLACE3000400//ESTs//8.3e-05:310:63//Hs.17697:AA287528

R-PLACE3000401//ESTs//4.6e-60:326:80//Hs.139555:N48230

R-PLACE3000402//Homo sapiens clone 24629 mRNA sequence//0.50:227:62//Hs.

142570:AF052160

R-PLACE3000405//Human HsLIM15 mRNA for HsLim15, complete cds//5.3e-43:31

5:82//Hs.37181:D64108

R-PLACE3000406//Human high-affinity copper uptake protein (hCTR1) mRNA,

complete cds//4.4e-47:302:87//Hs.73614:U83460

R-PLACE3000413//ESTs//1.6e-116:571:97//Hs.10235:H93077

R-PLACE3000416//Small inducible cytokine A5 (RANTES)//1.8e-41:300:85//Hs

.155464:AF088219

R-PLACE3000425/Homo sapiens 4F5S mRNA, complete cds//1.6e-46:307:85//Hs

.32567:AF073519

R-PLACE3000455//ESTs//1.0:160:64//Hs.156045:AA884461

R-PLACE3000475//Human signal transducing adaptor molecule STAM mRNA, com

plete cds//6.1e-84:440:92//Hs.153487:U43899

R-PLACE3000477//ESTs//2.4e-113:568:96//Hs.24557:AA142980

R-PLACE4000009//ESTs//1.5e-72:361:96//Hs.10119:AA700227

R-PLACE4000014//Homo sapiens mRNA for KIAA0809 protein, partial cds//8.8

e-85:433:95//Hs.105399:AB018352

R-PLACE4000034//ESTs//7.0e-110:550:96//Hs.76607:AA156240

R-PLACE4000049//EST//0.028:87:75//Hs.89303:AA284031

R-PLACE4000052//ESTs//5.6e-116:553:98//Hs.19067:AA521292

R-PLACE4000063//ESTs//5.0e-80:388:98//Hs.135028:AI096444

R-PLACE4000089//ESTs//2.3e-97:479:97//Hs.102425:AA807547

R-PLACE4000093//ESTs//1.5e-82:391:99//Hs.160730:AI142739

R-PLACE4000100

R-PLACE4000106//Homo sapiens mRNA for KIAA0462 protein, partial cds//2.7 e-98:419:91//Hs.129937:AB007931

R-PLACE4000128//ESTs, Moderately similar to !!!! ALU SUBFAMILY J WARNING ENTRY !!!! [H.sapiens] //3.8e-11:184:71//Hs.154278:N45985

R-PLACE4000129//Homo sapiens mRNA, chromosome 1 specific transcript KIAA 0500//5.2e-21:118:100//Hs.118164:AB007969

R-PLACE4000147//EST//1.6e-23:175:79//Hs.162236:AA551582

R-PLACE4000156//Homo sapiens mRNA for KIAA0575 protein, complete cds//3.

0e-47:306:88//Hs.153468:AB011147

R-PLACE4000192//ESTs, Weakly similar to similar to Human zinc finger pro

tein(ZNF142) [H.sapiens] //6.7e-31:232:82//Hs.16493:T92186

R-PLACE4000222//ESTs//2.2e-53:195:85//Hs.141575:AA211734

R-PLACE4000233//ESTs//2.9e-81:456:93//Hs.124964:R81949

R-PLACE4000247//Homo sapiens PYRIN (MEFV) mRNA, complete cds//5.5e-72:30

7:85//Hs.113283:AF018080

R-PLACE4000250//Small inducible cytokine A5 (RANTES)//7.1e-43:301:83//Hs .155464:AF088219

R-PLACE4000252//EST//1.6e-40:275:85//Hs.162197:AA535216

R-PLACE4000261//EST//0.0063:384:58//Hs.136284:AA400442

R-PLACE4000269//ESTs//7.3e-67:345:97//Hs.5000:R44586

 $R-PLACE 4000270//Homo\ sapiens\ apoptotic\ protease\ activating\ factor\ 1\ (\texttt{Apa}$ 

f-1) mRNA, complete cds//2.1e-37:352:77//Hs.77579:AF013263

R-PLACE4000300//EST//0.26:103:68//Hs.144438:AA780782

R-PLACE4000320//EST//2.7e-44:298:85//Hs.162404:AA573131

R-PLACE4000323//ESTs//8.8e-38:178:79//Hs.155475:AA761454

R-PLACE4000326//ESTs//7.4e-103:516:96//Hs.55042:AA150460

R-PLACE4000344//ESTs//9.9e-94:463:96//Hs.100057:AA001414

R-PLACE4000367//ESTs//0.81:102:73//Hs.107692:H38478

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R-PLACE4000369//ESTs//1.5e-69:390:92//Hs.13733:AA418656
R-PLACE4000379//ESTs//1.3e-67:373:91//Hs.48569:AA905425
R-PLACE4000387//EST, Moderately similar to !!!! ALU SUBFAMILY SQ WARNING
 ENTRY !!!! [H.sapiens] //1.9e-44:379:78//Hs.152369:AA504818
R-PLACE4000392//ESTs, Weakly similar to line-1 protein ORF1 [H.sapiens]/
/2.3e-70:482:83//Hs.140416:AA778649
R-PLACE4000401//ESTs//1.3e-18:151:84//Hs.150355:AI273502
R-PLACE4000411//ESTs//1.1e-108:543:96//Hs.23901:AA169780
R-PLACE4000445//ESTs, Weakly similar to C05D9.6 gene product [C.elegans]
//2.6e-111:530:98//Hs.12003:AA643063
R-PLACE4000465//Cytochrome P450, subfamily I (aromatic compound-inducible
e), polypeptide 2//8.5e-58:409:72//Hs.1361:M55053
R-PLACE4000489//ESTs//5.0e-70:342:98//Hs.72865:AI380932
R-PLACE4000494//ESTs//1.4e-109:525:98//Hs.22539:AI334210
R-PLACE4000522//ESTs//6.3e-88:471:93//Hs.8121:AA521290
R-PLACE4000548//ESTs//3.3e-86:441:96//Hs.5070:AA149527
R-PLACE4000558//Human putative monocarboxylate transporter (MCT) mRNA, c
omplete cds//5.7e-46:425:76//Hs.23590:U59185
R-THYR01000026//ESTs//2.6e-42:331:82//Hs.137875:AA993532
R-THYRO1000034//ESTs//2.1e-43:214:100//Hs.153018:AI243524
R-THYRO1000035//ESTs//7.6e-52:325:90//Hs.49817:AA001249
R-THYR01000040//ESTs//1.7e-94:459:98//Hs.48712:AI027889
R-THYRO1000070//ESTs//6.7e-43:283:86//Hs.37573:H59651
R-THYR01000072//ESTs//1.3e-57:313:96//Hs.127827:H13438
R-THYR01000085//ESTs//1.1e-90:439:98//Hs.150539:AA908435
R-THYRO1000092//Human mRNA for KIAA0355 gene, complete cds//1.3e-41:344:
79//Hs.153014:AB002353
R-THYR01000107//Interleukin 10//2.8e-43:292:84//Hs.2180:M57627
R-THYRO1000111//ESTs, Highly similar to LINE-1 REVERSE TRANSCRIPTASE HO
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MOLOG [Homo sapiens] //1.0e-52:413:80//Hs.140385:AA773359

R-THYR01000121//EST//0.24:78:74//Hs.156632:AI345108

R-THYR01000124//ESTs//2.8e-86:428:96//Hs.141634:AI122764

R-THYR01000129//Homo sapiens TED protein (TED) mRNA, complete cds//6.8e-90:449:96//Hs.87619:AF087142

R-THYRO1000132//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNIN

G ENTRY !!!! [H.sapiens] //5.2e-49:486:77//Hs.24164:N95217

R-THYR01000156//ESTs//6.1e-36:344:75//Hs.70279:AA757426

R-THYR01000163//Homo sapiens LIM protein mRNA, complete cds//4.8e-38:278:84//Hs.154103:AF061258

R-THYRO1000173//ESTs, Highly similar to CLATHRIN COAT ASSEMBLY PROTEIN

AP47 [Mus musculus] //1.1e-111:554:96//Hs.18894:AA910946

R-THYR01000186//ESTs//1.0e-44:339:83//Hs.155184:AA573189

R-THYR01000187//Small inducible cytokine A5 (RANTES)//1.1e-41:305:81//Hs .155464:AF088219

R-THYR01000190//Small inducible cytokine A5 (RANTES)//2.3e-44:301:85//Hs .155464:AF088219

R-THYR01000197//Homo sapiens mRNA for poly(A)-specific ribonuclease//3.6 e-110:535:97//Hs.43445:AJ005698

R-THYR01000199//Homo sapiens mRNA for KIAA0652 protein, complete cds//4.

3e-115:559:97//Hs.79672:AB014552

R-THYR01000206//ESTs//3.1e-90:507:90//Hs.32456:W29063

R-THYRO1000221//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT

RY !!!! [H.sapiens] //1.1e-72:357:98//Hs.140002:AA635349

R-THYRO1000241//Homo sapiens mRNA for KIAA0688 protein, complete cds//7.

8e-69:524:82//Hs.141874:AB014588

R-THYR01000242//ESTs//4.2e-27:222:85//Hs.77554:W87927

R-THYR01000253//Sialophorin (gpL115, leukosialin, CD43)//7.3e-40:318:80/ /Hs.80738:X52075 R-THYR01000270//ESTs//1.9e-99:531:94//Hs.17767:N62925

R-THYR01000279//EST//2.7e-54:266:99//Hs.149527:AI280674

R-THYRO1000288//Homo sapiens mRNA for Hs Ste24p, complete cds//3.5e-100:

566:91//Hs.25846:AB016068

R-THYR01000320//POLYPOSIS LOCUS PROTEIN 1//1.0:321:58//Hs.74648:M73547

R-THYR01000327//Autocrine motility factor receptor//9.2e-54:289:93//Hs.8

0731:M63175

R-THYR01000343//Homo sapiens mRNA for KIAA0790 protein, partial cds//3.4

e-113:559:96//Hs.12002:AB018333

R-THYR01000358//Human selenium-binding protein (hSBP) mRNA, complete cds

//1.5e-48:317:87//Hs.7833:U29091

R-THYR01000368//ESTs//4.7e-88:430:98//Hs.146085:AA021064

R-THYR01000381//ESTs//1.0:253:57//Hs.128783:AA436250

R-THYRO1000387//Homo sapiens ubiquitin conjugating enzyme G2 (UBE2G2) mR

NA, complete cds//4.6e-69:294:84//Hs.151614:AF032456

R-THYR01000394//Thromboxane A2 receptor//4.1e-40:232:87//Hs.89887:D38081

R-THYR01000395//ESTs//3.3e-20:160:83//Hs.101570:AA505429

R-THYR01000401//ESTs//1.3e-109:516:99//Hs.78524:AI140601

R-THYR01000438//ESTs//2.1e-48:360:83//Hs.141203:H52638

R-THYR01000452//ESTs, Weakly similar to No definition line found [C.eleg

ans] //8.5e-40:239:90//Hs.84009:AI309761

R-THYR01000471//ESTs//3.3e-36:302:80//Hs.70279:AA757426

R-THYR01000484//Homo sapiens mRNA for KIAA0737 protein, complete cds//2.

2e-49:479:75//Hs.17630:AB018280

R-THYR01000488//Homa sapiens mRNA for HRIHFB2038, partial cds//4.1e-89:4

71:94//Hs.28719:AB015333

R-THYR01000501//ESTs//1.5e-46:287:89//Hs.125300:R62360

R-THYR01000502//ESTs//1.7e-08:63:96//Hs.116319:AI208005

R-THYRO1000505//ESTs, Weakly similar to KIAA0281 [H.sapiens]  $\frac{1}{3.9e-57:28}$ 

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6:96//Hs.105861:AI206965
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R-THYR01000558//ESTs//1.7e-95:454:99//Hs.125063:AA648511

R-THYR01000569//ESTs//3.2e-89:463:94//Hs.20555:W22193

R-THYRO1000570//ESTs//2.8e-97:471:97//Hs.8245:AA115485

R-THYR01000585//Homo sapiens protein associated with Myc mRNA, complete

cds//2.6e-108:533:97//Hs.151411:AF075587

R-THYR01000596//ESTs//3.1e-99:527:94//Hs.6084:AA045247

R-THYR01000602//EST//6.9e-50:381:83//Hs.161917:AA483223

R-THYR01000605//ESTs, Weakly similar to monocytic leukaemia zinc finger

protein [H.sapiens] //1.2e-96:483:96//Hs.21907:N24415

R-THYR01000625//ESTs//5.6e-36:257:84//Hs.139657:AA191742

R-THYR01000637

R-THYRO1000641//ESTs, Weakly similar to ERYTHROCYTE BAND 7 INTEGRAL MEMB

RANE PROTEIN [H.sapiens] //4.9e-46:245:95//Hs.97398:AA398634

R-THYR01000658//ESTs//5.8e-48:281:90//Hs.142259:AA828840

R-THYR01000662//ESTs//1.5e-82:389:99//Hs.155573:AA487384

R-THYR01000666//ESTs//1.4e-26:179:88//Hs.98382:AA779866

R-THYR01000676//EST//6.4e-05:88:77//Hs.133424:AI061063

R-THYR01000684//ESTs//1.9e-69:374:94//Hs.144617:R77109

R-THYR01000699//ESTs//1.7e-58:394:86//Hs.26373:AA700713

R-THYR01000712

R-THYR01000734//EST//2.0e-06:95:73//Hs.156201:AA724287

R-THYR01000748//EST//4.1e-12:155:74//Hs.118694:AA148713

R-THYRO1000756//ESTs, Weakly similar to CMP-N-ACETYLNEURAMINATE-BETA-GAL

ACTOSAMIDE-ALPHA-2,3-SIALYLTRANSFERASE [H.sapiens] //8.1e-82:497:87//Hs.1

09672:W22624

R-THYRO1000777

R-THYR01000783//EST//5.6e-100:470:99//Hs.123515:AA812932

R-THYRO1000787//EST//8.0e-34:175:99//Hs.99607:AA463897

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R-THYR01000793//ESTs//2.2e-106:505:99//Hs.50929:AA443144
R-THYR01000796//ESTs//4.3e-44:445:75//Hs.55855:AA621381
R-THYR01000805//EST//2.6e-32:407:67//Hs.123424:AA813594
R-THYR01000815//Human mRNA for KIAA0033 gene, partial cds//2.0e-56:307:8
7//Hs.22271:D26067
R-THYR01000829
R-THYR01000843//Interleukin 10//1.1e-44:285:87//Hs.2180:M57627
R-THYR01000852//EST//2.3e-20:157:85//Hs.149580:AI281881
R-THYR01000855//ESTs//2.6e-44:359:81//Hs.140329:AA714011
R-THYR01000865//Protein kinase, interferon-inducible double stranded RNA
 dependent//2.8e-44:374:79//Hs.73821:M35663
R-THYR01000895//ESTs//1.0e-32:196:85//Hs.138630:H97871
R-THYR01000916//ESTs//4.6e-99:492:96//Hs.152442:AA528234
R-THYR01000926//Homo sapiens cAMP-specific phosphodiesterase 8B (PDE8B)
mRNA, partial cds//3.1e-110:566:94//Hs.78106:AF079529
R-THYR01000934//ESTs//7.4e-102:535:95//Hs.58194:W72182
R-THYR01000951//ESTs//4.2e-11:91:89//Hs.6278:T15859
R-THYR01000952//ESTs//3.9e-93:489:94//Hs.48928:AA211761
R-THYRO1000974//Homo sapiens ribosomal protein L33-like protein mRNA, co
mplete cds//1.1e-60:321:95//Hs.14454:AF047440
R-THYR01000975//EST//9.8e-49:303:89//Hs.149580:AI281881
R-THYRO1000983//ESTs, Highly similar to UBIQUITIN-CONJUGATING ENZYME E2
-17 KD 11 [Arabidopsis thaliana]//1.6e-90:474:93//Hs.106616:AI027524
R-THYR01000984//ESTs//5.9e-97:481:96//Hs.142457:AI202777
R-THYR01000988//EST//3.5e-42:241:83//Hs.162404:AA573131
R-THYR01001003//ESTs, Weakly similar to ubiquitin-conjugating enzyme [H.
sapiens]//3.0e-57:341:91//Hs.44049:AA521489
R-THYRO1001031//ESTs//5.5e-47:322:85//Hs.136839:H93717
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R-THYR01001033//ESTs//5.7e-89:427:98//Hs.71508:AA809070

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R-THYR01001062//EST//1.5e-46:291:89//Hs.161917:AA483223
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R-THYR01001093//ESTs//2.7e-80:468:90//Hs.124601:AA203497

R-THYR01001100

R-THYR01001120//ESTs, Moderately similar to fractionated X-irradiation-i

nduced 29 thymoma [M.musculus] //6.6e-86:491:89//Hs.89135:AI138834

R-THYRO1001121//Homo sapiens mRNA for beta-tubulin folding cofactor D//2

.6e-82:429:94//Hs.12570:AJ006417

R-THYR01001133//ESTs//2.9e-39:242:90//Hs.152340:AA521399

R-THYR01001134//ESTs//1.8e-102:521:95//Hs.108408:N31922

R-THYR01001142//ESTs//0.26:84:69//Hs.153434:AI287853

R-THYR01001173//Human mRNA for KIAA0238 gene, partial cds//0.0012:305:62

//Hs.82042:D87075

R-THYR01001177

R-THYR01001189//H.sapiens F11 mRNA//1.5e-59:260:83//Hs.159639:X77744

R-THYRO1001204//ESTs, Weakly similar to TH1 protein [D.melanogaster] //1.

0e-75:431:91//Hs.5184:AA709151

R-THYR01001213//ESTs//1.3e-75:409:92//Hs.140213:AA828932

R-THYRO1001262//Human kpni repeat mrna (cdna clone pcd-kpni-4), 3' end//

1.3e-48:349:83//Hs.139107:K00629

R-THYRO1001271//PUTATIVE PROTEIN PHOSPHATASE 2C//1.0:128:64//Hs.118728:D

13640

R-THYR01001290//ESTs//2.1e-89:424:99//Hs.118152:AA702561

R-THYR01001313//ESTs//3.5e-17:139:87//Hs.15827:H16269

R-THYRO1001320//ESTs//1.4e-61:403:79//Hs.139555:N48230

R-THYR01001321//Hypoxanthine phosphoribosyltransferase 1 (Lesch-Nyhan sy

ndrome)//8.5e-05:326:60//Hs.82314:M31642

R-THYRO1001322//ESTs//0.16:422:59//Hs.23876:AA082935

R-THYR01001347//ESTs, Weakly similar to C35A5.8 [C.elegans]//1.1e-106:56

2:94//Hs.15032:AA774250

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R-THYR01001363//ESTs//1.4e-99:508:95//Hs.5028:D51033
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R-THYR01001365

R-THYR01001374

R-THYRO1001401//Human HsLIM15 mRNA for HsLim15, complete cds//2.5e-48:46

7:75//Hs.37181:D64108

R-THYR01001403//Interleukin 10//2.1e-46:305:85//Hs.2180:M57627

R-THYR01001405//ESTs//4.8e-25:197:84//Hs.6907:W72733

R-THYR01001406//EST//0.0023:117:66//Hs.162931:AA633197

R-THYR01001411//ESTs//6.1e-77:421:93//Hs.22973:R40979

R-THYRO1001426//Homo sapiens mRNA, chromosome 1 specific transcript KIAA

0508//9.1e-49:305:86//Hs.159187:AB007977

R-THYR01001434//ESTs//0.40:161:61//Hs.161993:AA503172

R-THYRO1001458//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNIN

G ENTRY !!!! [H.sapiens] //1.7e-05:159:66//Hs.104239:AA488082

R-THYR01001480//Small inducible cytokine A5 (RANTES)//1.3e-40:331:79//Hs

.155464:AF088219

R-THYRO1001487//Homo sapiens mRNA for KIAA0563 protein, complete cds//2.

1e-17:134:76//Hs.15731:AB011135

R-THYR01001534//ESTs//4.6e-96:447:100//Hs.135204:AI093110

R-THYRO1001537//ESTs, Weakly similar to !!!! ALU SUBFAMILY J WARNING ENT

RY !!!! [H.sapiens] //5.0e-33:304:80//Hs.108740:W20094

R-THYRO1001541//Human peptide transporter (HPEPT1) mRNA, complete cds//9

.0e-49:427:76//Hs.2217:U21936

R-THYR01001559//ESTs//0.99:210:62//Hs.33619:AA021594

R-THYR01001570//ESTs//4.9e-48:287:91//Hs.27131:AA442413

R-THYR01001573//ESTs//2.1e-87:446:95//Hs.143669:AA621958

R-THYR01001584//ESTs//1.5e-64:354:95//Hs.146222:AA397741

R-THYR01001595//ESTs//5.7e-39:366:78//Hs.22562:R54247

R-THYR01001602//Insulin-like growth factor 1 (somatomedia C)//7.4e-12:28

8:67//Hs.85112:X57025

R-THYR01001605//Human GS2 mRNA, complete cds//6.9e-49:359:83//Hs.264:U03

R-THYRO1001617//Homo sapiens peroxisomal acyl-CoA:dihydroxyacetonephosph ate acyltransferase (DHAPAT) mRNA, complete cds//1.3e-82:434:93//Hs.1248 2:AJ002190

R-THYR01001637//Homo sapiens KIAA0414 mRNA, partial cds//7.1e-58:331:83//Hs.127649:AB007874

R-THYR01001656//ESTs//3.8e-19:209:75//Hs.92186:AI080282

R-THYR01001661//ESTs//1.4e-56:323:91//Hs.24984:AA534446

R-THYR01001671//Homo sapiens mRNA for 2'-5' oligoadenylate synthetase 59 kDa isoform//1.6e-111:562:95//Hs.118633:AJ225089

R-THYR01001673//Homo sapiens mRNA, chromosome 1 specific transcript KIAA 0488//1.0e-17:246:73//Hs.67619:AB007957

R-THYR01001703//ESTs//1.1e-39:142:97//Hs.110748:AI341726

R-THYR01001706//ESTs//2.2e-42:214:99//Hs.112536:AI147691

R-THYR01001721

R-THYR01001738//ESTs, Weakly similar to ZK1128.6 [C.elegans] //1.7e-10:14 7:77//Hs.158196:R53184

R-THYR01001745//ELK1, member of ETS oncogene family//1.8e-12:282:65//Hs. 116549:AL009172

R-THYR01001746//EST//0.0073:226:61//Hs.146544:AI125323

R-THYR01001772//ESTs//8.2e-100:495:97//Hs.144993:AA243474

R-THYR01001793//ESTs//2.5e-89:430:97//Hs.58127:AA534224

R-THYR01001809//ESTs//1.0e-41:327:80//Hs.146811:AA410788

R-THYR01001854//Homo sapiens mRNA, chromosome 1 specific transcript KIAA 0487//5.7e-38:242:83//Hs.92381:AB007956

R-THYR01001895//ESTs//1.7e-08:213:64//Hs.156056:AI352123

R-THYRO1001907//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNIN

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G ENTRY !!!! [H.sapiens] //3.7e-41:362:79//Hs.139007:H74314
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R-VESEN1000122

R-Y79AA1000013//ESTs//0.99:233:57//Hs.132216:AA923289

R-Y79AA1000033//EST//1.9e-62:324:95//Hs.157692:AI359321

R-Y79AA1000037//ESTs//6.1e-47:234:98//Hs.30773:AA557178

R-Y79AA1000059//Homo sapiens mRNA for KIAA0640 protein, partial cds//2.8

e-51:330:89//Hs.153026:AB014540

R-Y79AA1000065//ESTs//2.0e-91:497:94//Hs.37759:H59629

R-Y79AA1000131//EST//2.3e-16:184:75//Hs.141501:N50792

R-Y79AA1000181//ESTs, Weakly similar to No definition line found [C.eleg

ans] //2.4e-110:553:95//Hs.23159:AA113849

R-Y79AA1000202//Human mRNA for KIAA0169 gene, partial cds//0.094:185:62/

/Hs.79414:D79991

R-Y79AA1000214//ESTs//1.7e-93:495:94//Hs.11673:W68103

R-Y79AA1000230//ESTs//3.5e-114:553:98//Hs.47125:AI421812

R-Y79AA1000231//ESTs//1.1e-106:526:97//Hs.82856:AI246624

R-Y79AA1000258//ESTs//1.5e-99:490:97//Hs.6459:AI092936

R-Y79AA1000268//Human mRNA for KIAA0365 gene, partial cds//1.3e-44:320:8

4//Hs.84123:AB002363

R-Y79AA1000313//ESTs//1.7e-105:558:93//Hs.18851:AA857826

R-Y79AA1000328//ESTs//1.9e-76:448:91//Hs.16470:AA121635

R-Y79AA1000342//ESTs, Weakly similar to MATRIN 3 [H.sapiens]//2.0e-37:23

9:88//Hs.23476:AA401210

R-Y79AA1000346//ESTs//7.9e-12:139:76//Hs.115987:AA483808

R-Y79AA1000349//ESTs, Moderately similar to spermatid perinuclear RNA-bi

nding protein Spnr [M.musculus] //4.4e-66:339:97//Hs.8215:AA521150

R-Y79AA1000355//ESTs, Moderately similar to !!!! ALU SUBFAMILY SC WARNIN

G ENTRY !!!! [H.sapiens] //3.2e-44:279:88//Hs.139007:H74314

R-Y79AA1000368//ESTs//3.8e-97:513:94//Hs.68090:AA641018

R-Y79AA1000405//ESTs//4.4e-47:267:94//Hs.125304:R51613

R-Y79AA1000410//ESTs//7.4e-49:359:82//Hs.158107:AA707758

R-Y79AA1000420//EST//0.17:99:69//Hs.160859:AI352292

R-Y79AA1000469//ESTs, Highly similar to ancient ubiquitous 46 kDa protein AUP46 precursor [M.musculus]//3.1e-60:362:88//Hs.6381:AI188509

R-Y79AA1000480//ESTs//1.0e-75:433:91//Hs.78110:AA741320

R-Y79AA1000538//EST//7.9e-48:307:87//Hs.149580:AI281881

R-Y79AA1000539//Human kinesin-like spindle protein HKSP (HKSP) mRNA, complete cds//0.95:172:62//Hs.41723:U37426

R-Y79AA1000540//ESTs//1.5e-97:534:93//Hs.67991:AA147848

R-Y79AA1000560//ESTs, Highly similar to ALPHA-ADAPTIN [Rattus norvegicus]//8.2e-97:482:97//Hs.19121:AI125280

R-Y79AA1000574//ESTs, Weakly similar to M04B2.4 [C.elegans] //1.3e-107:56 4:93//Hs.16361:AI147455

R-Y79AA1000627//Homo sapiens zinc finger protein (ZF5128) mRNA, complete cds//3.4e-99:517:94//Hs.60580:AF060503

R-Y79AA1000705//ESTs, Weakly similar to HYPOTHETICAL 128.5 KD HELICASE I
N ATS1-TPD3 INTERGENIC REGION [Saccharomyces cerevisiae] //8.1e-27:140:10
0//Hs.129049:H28818

R-Y79AA1000734//Homo sapiens peroxisomal biogenesis factor (PEX11b) mRNA , complete cds//8.7e-114:586:95//Hs.83023:AF093670

R-Y79AA1000748//ESTs, Weakly similar to HYPOTHETICAL 61.3 KD PROTEIN F25 B5.5 IN CHROMOSOME III [C.elegans]//9.8e-111:563:95//Hs.19845:AI005330 R-Y79AA1000752//Homo sapiens (huc) mRNA, complete cds//0.97:235:59//Hs.1701:L26405

R-Y79AA1000774//ESTs//5.9e-109:559:95//Hs.17138:N91463

R-Y79AA1000782//Human mRNA for KIAA0246 gene, partial cds//1.6e-18:107:1 00//Hs.84753:D87433

R-Y79AA1000784//EST//0.80:87:67//Hs.158558:AI368359

R-Y79AA1000794//ESTs//2.7e-99:498:96//Hs.25441:AA580512

R-Y79AA1000800//ESTs//1.2e-97:532:93//Hs.77822:AA532642

R-Y79AA1000802//Carboxypeptidase E//0.018:354:59//Hs.75360:X51405

R-Y79AA1000805

R-Y79AA1000824//ESTs//0.99:276:61//Hs.153992:AA280227

R-Y79AA1000827//ESTs//1.2e-55:326:92//Hs.158127:A1334650

R-Y79AA1000850//Homo sapiens small optic lobes homolog (SOLH) mRNA, comp

lete cds//0.016:386:59//Hs.55836:U85647

R-Y79AA1000962//EST//0.024:177:63//Hs.25214:R37079

R-Y79AA1000968

R-Y79AA1000969//ESTs//2.9e-70:251:98//Hs.120858:AA417181

R-Y79AA1000976//ESTs//7.8e-56:299:95//Hs.120125:M86049

R-Y79AA1000985

R-Y79AA1001023//ESTs//5.7e-66:379:90//Hs.64616:W22851

R-Y79AA1001041//ESTs//8.6e-06:54:100//Hs.8980:AA629067

R-Y79AA1001048//ESTs//4.4e-97:461:99//Hs.7010:AA837407

R-Y79AA1001061//ESTs//3.8e-105:493:99//Hs.128419:AI271325

R-Y79AA1001068//Homo sapiens mRNA for KIAA0563 protein, complete cds//4.

8e-53:279:83//Hs.15731:AB011135

R-Y79AA1001077//ESTs//1.9e-51:339:87//Hs.11197:AA309047

R-Y79AA1001078//ESTs//8.3e-98:528:92//Hs.24608:AA161260

R-Y79AA1001105//ESTs//6.0e-77:393:96//Hs.30837:H08155

R-Y79AA1001145//ESTs//1.7e-13:285:64//Hs.128259:AA343015

R-Y79AA1001167

R-Y79AA1001177//EST//1.2e-05:92:76//Hs.65277:T15884

R-Y79AA1001185.

R-Y79AA1001211//ESTs//1.3e-70:344:97//Hs.49760:AA741051

R-Y79AA1001216//ESTs//5.8e=63:416:88//Hs.8595:W60933

R-Y79AA1001228//ESTs//9.3e-101:483:98//Hs.13916:AI025750

R-Y79AA1001233//EST//0.00027:232:62//Hs.132431:AA909674

R-Y79AA1001236//Homo sapiens mRNA for JM23 protein, complete coding sequ

ence (clone IMAGE 34581 and IMAGE 45355 and LLNLc110I133Q7 (RZPD Berlin)

)//1.1e-110:549:95//Hs.23170:AJ005892

R-Y79AA1001281//ESTs//3.6e-98:466:99//Hs.104442:AA481271

R-Y79AA1001299//Human Inil mRNA, complete cds//9.6e-25:133:100//Hs.15562

6:U04847

R-Y79AA1001312//ESTs//3.4e-92:454:97//Hs.127319:AI191149

R-Y79AA1001323//ESTs//1.6e-67:422:89//Hs.118559:AA887084

R-Y79AA1001384//ESTs//3.1e-104:496:98//Hs.153692:AA604143

R-Y79AA1001391//ESTs//2.2e-77:418:94//Hs.118608:AA101819

R-Y79AA1001394//ESTs//2.1e-78:409:95//Hs.23413:AA579859

R-Y79AA1001402//EST//9.3e-08:128:75//Hs.141607:N63891

R-Y79AA1001493//ESTs, Highly similar to UBIQUITIN-CONJUGATING ENZYME E2

-17 KD 11 [Arabidopsis thaliana] //4.4e-109:553:95//Hs.106616:AI027524

R-Y79AA1001511//ESTs//4.9e-49:271:92//Hs.109045:AA523704

R-Y79AA1001533//ESTs, Moderately similar to RNA polymerase I associated

factor [M.musculus] //6.2e-46:260:94//Hs.24884:AA176812

R-Y79AA1001541//EST//0.62:126:67//Hs.137020:AA868563

R-Y79AA1001548//PHOSPHATIDYLINOSITOL 4-KINASE ALPHA//3.5e-95:517:91//Hs.

76987:AF012872

R-Y79AA1001555//Collagen, type XI, alpha 1//1.0:157:64//Hs.82772:J04177

R-Y79AA1001585//ESTs//1.9e-90:430:98//Hs.48333:AA704508

R-Y79AA1001594//ESTs//9.6e-23:122:100//Hs.63795:AI126237

R-Y79AA1001603//ESTs//1.0e-50:193:100//Hs.25635:AI336204

R-Y79AA1001613//ESTs, Weakly similar to zinc finger protein [H.sapiens]

/7.2e-81:400:97//Hs.13323:AA897542

R-Y79AA1001647//ESTs//6.8e-92:479:95//Hs.154270:N26486

R-Y79AA1001665//ESTs, Weakly similar to 50S RIBOSOMAL PROTEIN L20 [E.col

i] //2.5e-19:112:97//Hs.26252:AA643235

nd GSSs//0.0085:251:63//Hs.21864:AL031652

R-Y79AA1001679//ESTs, Highly similar to LAMBDA-CRYSTALLIN [Oryctolagus cuniculus] //9.7e-99:553:92//Hs.108896:R54040

R-Y79AA1001692

R-Y79AA1001696//ESTs//1.4e-84:478:91//Hs.6606:AA211783

R-Y79AA1001705//ESTs//6.7e-107:546:95//Hs.106805:AA418490

R-Y79AA1001711//Human DNA sequence from clone 1119D9 on chromosome 20p12. Contains part of a gene for a PAK1 LIKE Serine/Threonine-Protein Kinas e and part of the PLCB4 gene for Phopholipase C, beta (1-Phosphatidylino sitol -4,5-Bisphosphate Phosphodiesterase Beta 4). Contains ESTs, STSs a

R-Y79AA1001781//ESTs, Weakly similar to partial CDS [C.elegans]//9.4e-87:427:97//Hs.18645:AI023798

R-Y79AA1001805//ESTs//1.1e-112:558:97//Hs.109755:AA180809

R-Y79AA1001827//ESTs, Weakly similar to Similar to S.cerevisiae YD9335.0

3c protein [H.sapiens] //8.1e-95:530:91//Hs.72444:W23217

R-Y79AA1001846//EST//2.8e-41:312:81//Hs.162236:AA551582

R-Y79AA1001848//Human adhalin (DAG2) mRNA, complete cds//0.54:221:58//Hs .99931:L34355

R-Y79AA1001866//ESTs//2.2e-102:498:97//Hs.130683:A1278630

R-Y79AA1001874//ESTs//1.9e-76:377:98//Hs.79707:AA354094

R-Y79AA1001875//ESTs//0.64:152:63//Hs.156159:AI333652

R-Y79AA1001923//EST//0.19:180:58//Hs.148290:AA908404

R-Y79AA1002027//ESTs//1.6e-104:497:98//Hs.21275:N73275

R-Y79AA1002083//Homo sapiens mRNA for KIAA0563 protein, complete cds//0.

69:93:73//Hs.15731:AB011135

R-Y79AA1002089//Homo sapiens PYRIN (MEFV) mRNA, complete cds//1.1e-46:39

2:80//Hs.113283:AF018080

R-Y79AA1002093//Homo sapiens GT198 mRNA, complete ORF//1.2e-12:80:100//H

#### s.78185:L38933

R-Y79AA1002103//ESTs//1.3e-52:535:76//Hs.142167:AI417785

R-Y79AA1002115//ESTs//4.2e-101:519:96//Hs.23977:AA115275

R-Y79AA1002125//ESTs//9.8e-68:363:94//Hs.72085:AA193399

R-Y79AA1002139//ESTs//1.2e-100:498:96//Hs.72020:AA149858

R-Y79AA1002204//ESTs//2.1e-83:434:95//Hs.22979:R43725

R-Y79AA1002208//ESTs//1.7e-55:478:76//Hs.154554:AA552715

R-Y79AA1002209//ESTs, Weakly similar to similar to tyrosyl-tRNA syntheta

se. [C.elegans] //3.5e-108:553:95//Hs.50441:AA747428

R-Y79AA1002210//ESTs//4.2e-16:92:100//Hs.54862:AA248349

R-Y79AA1002211//ESTs, Weakly similar to PHOSPHATIDYLETHANOLAMINE-BINDING

PROTEIN [H.sapiens] //6.5e-86:518:90//Hs.25682:AA857843

R-Y79AA1002220//EST//1.3e-68:326:100//Hs.131052:AI016274

R-Y79AA1002229//ESTs//1.9e-98:467:98//Hs.132002:AI039977

R-Y79AA1002234//Homo sapiens mRNA for KIAA0692 protein, partial cds//2.0

e-118:564:98//Hs.100729:AB014592

R-Y79AA1002246//ESTs, Weakly similar to PROTEIN KINASE C, BRAIN ISOZYME

[D.melanogaster] //9.0e-102:507:96//Hs.25895:AI341537

R-Y79AA1002258//Homo sapiens mRNA for KIAA0655 protein, partial cds//2.4

e-93:453:97//Hs.96731:AB014555

R-Y79AA1002298//ESTs//0.022:241:62//Hs.118272:N90288

R-Y79AA1002307//Homo sapiens mRNA for KIAA0634 protein, partial cds//8.1

e-110:403:99//Hs.30898:AB014534

R-Y79AA1002311//EST//2.6e-27:214:85//Hs.144721:AI187985

R-Y79AA1002351//ESTs//5.6e-100:489:97//Hs.30318:AA913371

R-Y79AA1002361

R-Y79AA1002399//ESTs//0.029:149:65//Hs.43872:N26908

R-Y79AA1002407//ESTs//2.8e-117:552:99//Hs.99519:AI042000

R-Y79AA1002416//ESTs//2.6e-107:531:96//Hs.6716:AA502753

R-Y79AA1002431//EST//6.6e-23:128:98//Hs.128417:AA975026

R-Y79AA1002433//ESTs, Highly similar to CELL DIVISION CONTROL PROTEIN 6

8 [Saccharomyces cerevisiae] //4.4e-62:390:88//Hs.143930:AI207821

R-Y79AA1002472//ESTs//1.1e-39:234:78//Hs.117969:H94870

R-Y79AA1002482//ESTs//3.4e-45:312:85//Hs.146811:AA410788

R-Y79AA1002487//ESTs//1.7e-80:427:94//Hs.49210:N66499

[0296]

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SEQUENCE LISTING

<110> Helix Research Institute

<120> Primers for Synthesis of Full Length cDNAs and there uses.

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| gctcccagcc | ggcgcagctt | cctggacgcc | gccagctcgg | gctggtgccg | ttcccgccgc | 180   |
| cgccgccgcg | gacgccgctg | ctgtggctgc | tgctgctgct | gctggccgcc | gtggcgccgg | 240   |
| cgcgcggctg | ggagagcgga | gacctggagt | tgtttgactt | agtggaggag | gtgcagctca | 300   |
| acttctacca | gttcctcggg | gtgcagcagg | atgcatcatc | tgcagacatc | agaaaagcat | 360   |
| atcgtaagct | ttcactaact | ttacatccag | acaagaataa | agatgaaaat | gcagaaactc | 420   |
| agtttagaca | attggtggcc | atttatgaag | ttttaaagga | tgatgaacga | aggcagaggt | 480   |
| atgatgatat | tctgatcaat | ggacttccag | attggcgaca | gcctgtattc | tactacaggc | 540   |
| gggtgagaaa | aatgagcaat | gctgagctgg | cattactctt | gttcattatt | ctcacagtgg | 600   |
| gtcattatgc | tgtggtttgg | tcaatctacc | tggaaaaaca | actggatgaa | ctactaagta | 660   |
| naaaaaagag | agaaaagaaa | aaaaagactg | gancaagagt | gtggatgtat | caaaactcgg | 720   |
| gtgcttcaga | aaaaaaatga | aaagantgct | gattgaaacc | acagtgggca | atgatttgct | 780   |
| ttcaatgcaa | aactggggga | attttgggtt | ttgcccttaa | aactaaaaag | caattacctc | 840   |
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| tttggctctg | gctgatgctg | gtgacactgt | agaagatgcc | aactttgtgg | aagccatggc | 120 |
| agatgcaggt | attctccgtc | tgtacacctg | ggtagagtgg | gtgaaagaaa | tggttgccaa | 180 |
| ctgggacagc | ctaagaagtg | gtcctgccag | cactttcaat | gatagagttt | ttgccagtga | 240 |
| attgaatgca | ggaattataa | aaacagatca | aaactatgaa | aagatgatgt | ttaaagaagc | 300 |
| tttgaaaaca | gggtttttg  | agtttcaggc | cgcaaaagat | aagtaccgtg | aattggctgt | 360 |
| ggaagggatg | cacagagaac | ttgtgttccg | gtttattgaa | gttcagacac | ttctcctcgc | 420 |

# 特平11-248036

| tccattctgt | ccacatttgt | gtgagcacat | ctggacactc | ctgggaaagc | ctgactcaat | 480 |
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| tatgaatgct | tcatggnctg | tggcaggtcc | tgttaatgaa | gttttaatac | actcctcaca | 540 |
| gtatcttatg | gaagtaacac | atgaccttag | actacgactc | aagaactata | tgatgccagc | 600 |
| taaagggaag | aagactgaca | aacancccct | gcanaaagcc | ctcacattgc | accaacctat | 660 |
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| ccgccgccg | c catcatgagg  | gaaaacgtgc | acttgcaggc | cgggcagtgc | ggcaaccaaa | 120 |
| tcggcgcca | aa gttttgggag | gtgatcagcg | atgagcacgg | catcgacccc | acgggcacct | 180 |
| accacgggg | ga cagcgacctg | cagctggaac | gcatcaacgt | gtactacaat | gaggccaccg | 240 |
| gcggcaag  | ta cgtgccccgc | gccgtgctcg | tggatctgga | gcccggcacc | atggactccg | 300 |
| tgcgctcgg | gg gcccttcggg | cagatettee | agctgaccca | ctccctgggt | ggggggactg | 360 |
| ggtctggga | at gggtaccctc | ctcatcagca | agatccggga | ggagtaccca | gacaggatca | 420 |
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| acgccacco | ct ctcagtccac | cagctcgtag | aaaacacaga | cgagacctac | tgcattgata | 540 |
| acgaagcto | ct ctacgacatt | tgcttcanaa | ccctaaagct | gaccacgccc | acctatggtg | 600 |
| acctgaacc | ca cctggtgtcn | gctaccatgg | gtggggtcac | cacctgcctg | cgcttcccag | 660 |
| gncagctca | a tgctgacctg  | cggaagctgg | gtgtaaacat | ggtcccgttt | cccgggtnca | 720 |
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| agctggaaag | cctggatgga | gacctagatc | ctgggcttcc | cagcacagag | gatgtcatct | 180 |
| tgaagacaga | gcaggtcacc | aagaacattc | aggaactgtt | gcgggcagcc | caggagttca | 240 |
| agcatgacag | cttcgtgccc | tgctcagaga | agatccattt | ggctgtgacc | gagatggcct | 300 |
| ccctcttccc | aaagaggcca | gccctggagc | cagtgcggag | ctcactgcgg | ctgctcaacg | 360 |
| ccagcgccta | ccggctgcag | agtgagtgcc | ggaagacagt | gcccccagag | cccggcgccc | 420 |
| cagtggactt | ccagctgctg | actcagcagg | tgatccagtg | cgcctatgac | atcgccangg | 480 |
| ctgccaagca | gctggtcacc | atcaccaccc | gagagaagaa | gcagtgacct | ctctcccac  | 540 |
| accctcacct | gcaccctagg | acctcactgg | ccatangagc | tgggccactc | cagacattaa | 600 |
| tccccacccç | aacagagcca | ctggcacaag | tgcccttagt | gctgccacac | tccctggcag | 660 |
| ccaggtgccc | tggtgccacc | cctgtcgagc | ccctaaggat | ggggaggtgg | nggggcagga | 720 |
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| atagactttg | cattcagaat | gttcccattt | tcattgtgtt | gtactgatga | taatttaagt | 360 |
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| ttcatcaagc | tgttcaaaca | cggggaagat | tggctggtcg | gcctgggtct | tccgagagcg | 480 |
| ctggtaatta | gatctgcgaa | ggatttattc | tttgctgatt | ggggctttaa | attaattgaa | 540 |
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| tttaagattt | tttgatgaat | caagggctga | tttgaagtgc | aaagttgtan | ttgcttacct | 720 |
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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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| guauoccou              | ttootaoaaa | ·          | at tancougg | 186 186 11160   | Boardoorge                            | 120 |
|------------------------|------------|------------|-------------|-----------------|---------------------------------------|-----|
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|                        |            |            |             |                 |                                       |     |
| <210> 10               |            |            |             |                 | ?                                     | . ' |
| <211> 713              |            |            |             | :               | •                                     |     |
| <212> DNA              |            |            |             |                 |                                       | •   |
| <213> Homo             | sapiens    |            |             |                 |                                       |     |
|                        |            |            |             | •               |                                       |     |
| <400> 10               |            |            |             |                 |                                       |     |
|                        | ttccatttct | gatttctgct | ctctgcgctg  | agcacagcgg      | caccaggetg                            | 60  |
| agctaagcag             | - 1.       |            |             |                 |                                       | . • |
|                        |            |            |             | agcagagtgg      | •                                     | 180 |
|                        |            |            |             | cagaatggag      |                                       | 240 |
|                        |            |            |             | in the state of | •                                     | •   |
|                        |            |            | •           |                 | tggctgccca                            |     |
|                        |            | : ·        |             | gcggcaccta      | •                                     | 360 |
| 25                     |            |            |             |                 | catggtgaag                            |     |
|                        |            |            |             | cctgagtggg      |                                       | 480 |
|                        |            |            | ,           |                 | acagcagagc                            |     |
| ttctgcagat             | ggcactgacc | agccccgagg | angangagca  | cgtggagctc      | actgtcntct                            | 600 |
| ccctgatcgt             | ggtgggatga | gtgccaacac | acgcacaagg  | acaccgtcta      | caacgtcatc                            | 660 |
| atgaagccag             | tacctanaac | ttaaactcca | aaggggaana  | nccgctaacc      | cca                                   | 713 |
|                        |            | • •        |             | •               |                                       |     |
| <210> 11               |            |            |             |                 | · .                                   | ,   |
| <b>&lt;211&gt; 823</b> |            |            |             |                 | •                                     |     |
| <212> DNA              |            |            |             |                 | •                                     |     |
| <213> Homo             | sapiens    |            |             |                 |                                       | * 3 |
|                        |            | •          |             |                 |                                       |     |
| <400> 11               |            | **         |             |                 | · · · · · · · · · · · · · · · · · · · |     |

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60

tacgaagcat tccagaagac tcagagttaa atacagttac attgccaaga aaagcaagaa

| tgaaagacca | gtttggcaat | tctattatca | acacacctct | gaaacgtcgt | aaagtgtttt | 120 |
|------------|------------|------------|------------|------------|------------|-----|
| ctcaagaacc | tccagatgct | ttagctttaa | gctgccaaag | ttcctttgac | agtgtcattt | 180 |
| taaactgtcg | aagtatacga | gtaggaacac | tcttccggct | gttaatagag | cctgtaattt | 240 |
| tttgtttaga | ttttatcaag | atacagctag | acgaaccaga | ccatgatcct | gtagagatta | 300 |
| tattaaatac | ctctgatcta | actaaatgtg | aatggtgtaa | tgtccgaaaa | ttacctgtag | 360 |
| tgtttcttca | agcaattcca | gcagtttatc | aaaagctgag | catccaactg | caaatgaata | 420 |
| aggaggataa | agtttggaat | gattgtaaag | gagtaaataa | attaacaaat | ttagaagaac | 480 |
| aatatataat | tttaattttt | caaaatggcc | ttgatcctcc | ggcaaatatg | gtatttgaaa | 540 |
| gtatcattaa | tgaaattggt | ataaagaata | acatctccaa | tttttttgcg | aaaattccct | 600 |
| ttgaagaagc | taatggcaga | cttgttgcct | gtacaagaac | ctatgaagag | agcatcaaan | 660 |
| ggaagttgtg | gggcaaaagg | gaaacaaaat | taaaactgta | tcatttgaat | ctaaaataca | 720 |
| acttaagaag | caaacaagaa | tttcagtttt | ttggatgaan | gaaagaagga | aactgggaga | 780 |
| aaaccacacc | aatcttcaan | tgggcccaag | tngaaaaagg | ttg        | •          | 823 |

<210> 12

<211> 603

<212> DNA

<213> Homo sapiens

| ggaaggctga | ggcaggagaa | tcgcttgaac | ccgggaggcg | gaggttgcag | tgagccaagt | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tcgcaccact | gcactccagc | ctgggcaaca | agagcgagac | ttcatctcaa | aagaaaaaaa | 120 |
| anaaagaaaa | agctgcccca | tcgcatcgca | tagaggctgc | tatgggatta | gaacgtagct | 180 |
| tgagatctgc | aggtcaacag | gtctgtttgg | catctcaggt | tttcctcaca | taagtgaaag | 240 |
| atgcctggta | tggcctagtg | ttgttctgcc | tccctcctct | gcccgccagg | tatacatgga | 300 |
| ctggtacgag | aagttccagg | acaggctcaa | caagaaggtg | gtactcctga | caggcgagac | 360 |
| cagcacagac | ctgaagctgc | tgggcaaagg | gaacattatc | atcagcaccc | ctganaagtg | 420 |
| ggacatactt | tcccggcgat | ggaagcancg | caagaacgtg | cagaacatca | acctcttcgt | 480 |
| ggtggatgag | gtccacctta | tcgggggcga | taatggggta | tggcgttcct | tgcagcacag | 540 |

| atgagggact | gggantgacc | aagtggnctt | ggcattggnc | ctaatgtttg | ggtctgagga | 600 |
|------------|------------|------------|------------|------------|------------|-----|
|            | *          |            | •          |            | _          | مذم |
| cgg        | •          | •          |            |            | •          | 603 |

<210> 13

<211> 744.

<212> DNA

<213> Homo sapiens

## **<400>** 13

| aagatggctg | ccgctaccgg | tgcggtggca | gcctcggccg | cctcgggtca | ggcggaaggt | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| aaaaagatca | ccgatctgcg | ggtcatcgat | ctgaagtccg | agctgaagcg | gcggaactta | 120 |
| gacatcaccg | gagtcaagac | cgtgctcatc | tcccgactca | agcaggctat | tgaagaggaa | 180 |
| ggaggcgatc | cagataatat | tgaattaact | gtttcaactg | atactccaaa | caagaaacca | 240 |
| actaaaggca | aaggtaaaaa | acatgaagca | gatgagttga | gtggagatgc | ttctgtggaa | 300 |
| gatgatgctt | ttatcaagga | ctgtgaattg | gagaatcaag | aggcacatga | gcaagatgga | 360 |
| aatgatgaac | taaaggactt | tgaagaattt | ggtgaaaatg | aagaagaaaa | tgtgcattcc | 420 |
| aaggagttac | tctctgcaga | agaaaacaag | agagctcatg | aattaatana | ggcagaagga | 480 |
| atagaagata | tagaaaaaga | ggacatcgaa | agtcaggaaa | ttgaagctca | agaaggtgaa | 540 |
| gatgatacct | ttctaacagc | ccaagatggt | gaggaagaag | aaaatgagaa | agatatagca | 600 |
| ggttctggtg | atggtacaca | aggaagtatc | taaacctctt | ccttcanaag | ggaacctact | 660 |
| gangctgatc | acacagetea | tgaagagatt | ggaaagctca | tncgaactgt | gaaagaagct | 720 |
| gagggatgac | aaaatctccg | ggca       |            |            |            | 744 |

<210> 14

<211> 782

<212> DNA

<213> Homo sapiens

| acccatctac | agcaagaaga | cggaaatcca | aaggcagaca | gtacgggctc                            | ccttcgccaa  | 60  |
|------------|------------|------------|------------|---------------------------------------|-------------|-----|
| actcttcatt | ttctctgcac | ttcaggtggc | aagacagctc | cttcttcagc                            | agcaacagca  | 120 |
| gcagcaagtt | agtggattaa | aatctcccaa | gaggaatgac | aaacaaccag                            | ctcttcaggt  | 180 |
| tcccgtgtca | gtggctatga | tgacacctca | agttatcact | ccccagcaaa                            | tgcagcagat  | 240 |
| cctccagcaa | caagtgctga | gccctcagca | gctccaggtt | ctcctccagc                            | agcagcaggc  | 300 |
| cctcatgctt | caacagcagc | agcttcaaga | gttttataaa | aaacaacagg                            | aacagttgca  | 360 |
| gcttcaactt | ttacaacaac | aacatgctgg | aaaacagcct | aaagagcaac                            | agcgggtggc  | 420 |
| tacccagcag | ttggcttttc | agcagcagct | tttacagatg | cagcagttac                            | agcaagcagc' | 480 |
| acctcctgtc | tttgcaagcg | ccaaggcctt | gtgacaattc | aagcccgggc                            | agcctgccct  | 540 |
| tccccttcaa | cctcttgctc | aaggcatgat | tccaacagaa | ctgcagcagc                            | tctggaaaga  | 600 |
| agtgacaagt | gctcatactg | cagaagaaac | cacaggcaac | aatcacagca                            | gtttggatct  | 660 |
| gaccacgaca | tgtgtctcct | cctctgcacc | ttccaagact | ccttaanaat                            | gaacccacat  | 720 |
| gcctctacaa | tgggacagct | ctcagtccan | actcccaaaa | ngggaaagtt                            | tgtcccatga  | 780 |
| gg         |            | •          |            | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 |             | 782 |

⟨210⟩ 15

<211> 589

<212> DNA

<213≻ Homo sapiens

| aggaag | taga | acgccggctc | gcatgcctgc | ccgcccgcca | gcctgccggg | tacggccttt | 60  |
|--------|------|------------|------------|------------|------------|------------|-----|
| tccgcc | gggg | cttccaggtc | aaagaattcg | cctttgccgc | taccgctttc | ttaccctccg | 120 |
| cacccg | ttaa | gttctccggt | cgggcggcag | tctctgaaca | cttagccgcg | ccatccgggg | 180 |
| tcacac | cgcc | tggaaggagg | tgacgggggc | ggcgcggggc | gcggacactc | cccgctgaga | 240 |
| gtccgc | ctgc | catggactcg | gaatattaca | gcggcgacca | gtcagatgat | ggtggtgcta | 300 |
| ccccag | taca | ggatgaacgg | gattcagggt | cagacggtga | ggatgatgta | aatgagcaac | 360 |
| actccg | gatc | agacactgga | agtgtagaac | gtcattcaga | gaatgaaact | agtgactcag | 420 |
| aaaatg | aaga | gcttcccaaa | ccccgaatca | gtgattcgga | aagtgaggat | ccccaaggaa | 480 |

| ccaggccagt | gattcggaaa | atgaggagct | acccaaaccc | cgagtcaant | gactctgaga | 540 |
|------------|------------|------------|------------|------------|------------|-----|
|            | to the     |            |            | *          |            |     |
| gtgangggcc | tcanaagggg | cctgccagtg | actcagaaac | tgaggatgc  | •          | 589 |

<210>. 16

**<211>** 730

<212> DNA

<213≻ Homo sapiens

## **<400> 16**

| atcgcttctc | ggccttttgg | ctaatgatca | agtgtagtat | ctgttcttat | cagtttaata | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tctgatacgt | cctctatccg | aggacaatat | attaaatgga | tttttggaac | aaaacaaaac | 120 |
| aaaaacaaaa | acaaaaaatc | caaacaaaaa | caatcctgcc | gaagtggggc | agaaatgagt | 180 |
| ggaaacttaa | caaatgaatg | ggaaaaaaaa | aatcgaagtt | cctttatcga | aaatataatg | 240 |
| tattttaact | aaagtgttaa | attttgaaac | agtggaataa | aacgtttaaa | gtgaatttta | 300 |
| ttcccatctt | tgcggcaaat | gcccagggtc | ccccaaaaaa | gggcatgctc | aagtcccca  | 360 |
| cagtcgaaat | ctgctaatcc | agaatgaaaa | tggaatcatt | aggataaaat | tatcgagtgt | 420 |
| gttcaggagc | ggctatgcca | gtgaatttcc | agcctgaaat | gaaatcatga | cttangtgta | 480 |
| tttatgagta | tctgttttaa | aaaccactgt | gatagctagc | tatcacctca | aattttgaag | 540 |
| tcgtttcgtt | gagtgtgaaa | naaaggagaa | gacatttcaa | agtgcattta | gctatttaaa | 600 |
| aaccctttat | tcactgantg | tgctgctgat | tattacatgt | ctgtggaagc | ttctggagcc | 660 |
| attggtggga | gaggcaagat | gtgaaanaat | cagtcgagat | ggtanattga | tatgacattt | 720 |
| tgnaccaaca | • .        | * *        |            | •          | •          | 730 |

<210> 17

<211> 542

<212> DNA

<213≻ Homo sapiens

| agcctacacc | gactctggga | ggaagactgg | agcctttgcg | gcggcgctgc | ccctccctg  | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| gtccccgcga | gctcggaggg | cccggctggt | gctgcggggg | ccccgggagc | gtgcttctgt | 120 |
| tcttcaagat | tgaaaactaa | gcatggggaa | gagctgcaag | gtggtcgtgt | gtggccaggc | 180 |
| gtctgtgggc | aaaacttcaa | tcctggagca | gcttctgtat | gggaaccatg | tagtgggttc | 240 |
| ggagatgatc | gagacgcagg | aggacatcta | cgtgggctcc | attgagacag | accggggggt | 300 |
| gcgagagcag | gtgcgtttct | atgacacccg | ggggctccgg | gatggggccg | aactgccccg | 360 |
| acactgcttc | tcttgcactg | atggctacgt | cctggtctat | agcacagata | gcagagagtc | 420 |
| ttttcaacgt | gtggagctgc | tcaagaagga | gattgacaaa | tccaaggaca | agaaggangt | 480 |
| caccatcgtg | gtccttggca | acaaagtgtg | acttacagga | gcancggcgt | gttagaccca | 540 |
| gn         |            |            |            |            |            | 542 |

. <210> 18

<211> 751

<212> DNA

<213> Homo sapiens

| gcttctccgg | cggaacccag | gctggaccgc | gggccccggc | ctgggggcca | ctgctgccac | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| cgccgccgcc | acctcgtctc | ctcccgtcc  | ccgcccagcc | ccaggtctcc | ecgecteact | 120 |
| cgggcccgtg | gccggggtca | ctcccgccg  | ccctccccg  | cacggatgcc | gaaggtgaag | 180 |
| gcgctgcagt | gcgccctggc | gctggagatc | agctcagtaa | cttgcccagg | agtcgtgctt | 240 |
| aaagacaaag | aggacatcta | tcttagcatc | tgtgtgtttg | gccaatacaa | aaagacacaa | 300 |
| tgtgtcccag | ccacttttcc | cctggtcttc | aatgccagaa | tggtgtttga | aaaggtgttc | 360 |
| ccggacgcag | tagatcctgg | agatgtggtt | acacagcttg | aatatgatac | agcagtgttc | 420 |
| gagttgatac | agctagttcc | accagtgggt | gaaacactgt | ctacgtatga | cgaaaataca | 480 |
| cgagatttca | tgtttccggg | tccaaaccaa | atgtctggac | accatgattc | aaaccgccag | 540 |
| gttaccatga | ggaggatttc | tggccttcga | ggaaatgctc | caaggctgga | attttctacg | 600 |
| acttcagtga | ttactgaatg | tctgataagt | tcaaggaaat | gccacactca | ggataaattt | 660 |
| atttaccant | tggctccagt | tgaaaaatca | catggcaaac | tgcaaaaaca | gaacatcaag | 720 |

### atnacaanag aaaaaaatcc aaagtcacct t

751

⟨210⟩ 19

<211> 806

<212> DNA

<213> Homo sapiens

### <400> 19

| gregiergeg | gcggcggcgg | cggcigagga | gcccggctga | ggegeeagta | cccggcccgg | D.U |
|------------|------------|------------|------------|------------|------------|-----|
| tccgcatttc | gccttccggc | ttcggtttcc | ctcggcccag | cacgccccgg | cccgcccca  | 120 |
| gccctcctga | tccctcgcag | cccggctccg | gccgcccgcc | tctgccgccg | caatgatgat | 180 |
| gatggcgctg | agcaagacct | tcgggcagaa | gcccgtgaag | ttccagctgg | aggacgacgg | 240 |
| cgagttctac | atgatcggct | ccgaggtggg | aaactacctc | cgtatgttcc | gaggttctct | 300 |
| gtacaagaga | tacccctcac | tctggaggcg | actaagccac | tgtggaagag | aggaagaaaa | 360 |
| tagttgcatc | gtcacatgat | cacggataca | cgactctagc | caccagtgtg | accctgttaa | 420 |
| aagcctcgga | agtggaagag | attctggatg | gcaacgatga | gaagtacaag | gctgtgtcca | 480 |
| tcagcacaga | gcccccacc  | tacctcaggg | aacagaaggc | caagaggaac | agccagtggg | 540 |
| tacccaccct | gcccaacagc | tcccaccact | tagatgccgt | gccatgctcc | acaaccatca | 600 |
| acaaggaacc | gcatggggcc | gaagacaaga | agagaaacct | tcccctttg  | ctttgatgac | 660 |
| catgacccan | ctgtgatcca | tgagaacgca | tctcaagccc | gaggtgctgg | tccccatccc | 720 |
| ggctgggcat | ggagattcga | tggggangaa | gctgcgaaga | cgccttcacc | tgggaacatg | 780 |
| aatgagaagt | tnatgacccc | ngagaa     |            |            | ₹.         | 806 |

<210> 20

**<211> 891** 

<212> DNA

<213> Homo sapiens

| 60  | gaagccatct | agatatgtta | ggctgagggc | attttgaaaa | attaacaagc | acacttttat |
|-----|------------|------------|------------|------------|------------|------------|
| 120 | tcctgagttt | gttttcccac | ttgtccttca | ttaaatgtaa | aaattcatgc | tcttattcct |
| 180 | ttggcctggc | gttctgtaca | aaggaaaagg | tggtttgggg | ggatgatggg | ggagtctgct |
| 240 | ctgttctccc | aatgcctgga | ctacctggag | tttatatttc | gctcgctata | ctgcaatacg |
| 300 | aggacactga | tggccgcggg | caggctcagc | tgaagagcag | cttcaaggag | catggaagtt |
| 360 | aggtaaactt | tggcaggaaa | cagtacatat | acaggagcta | ctcatctcac | gggcatcctg |
| 420 | tcagttcttt | atgaggactt | atggagttca | caacagggaa | attggaatta | tcgtaatctc |
| 480 | tgaaaccggc | cagtaagagt | tctgccagtg | atagaatttc | gttaaggatg | gcttggttag |
| 540 | atataatttc | gtgaatgtgg | gtgtttcgag | gggaatgaaa | agtaagtgga | agttacacta |
| 600 | agatagaatt | actgggaaga | cctaacacaa | ttatttggtt | ttatttattc | cctcttctga |
| 660 | tatatttaaa | aattacaaga | ccgtttaaaa | ttggagagaa | ttcttttttc | catctatact |
| 720 | taaaagttaa | aaaataaagt | cttttgttaa | agcacatgtg | gataaaagtt | aagtaaccaa |
| 780 | tttagcaaat | ttacatatcc | tcaggaaact | aaaagtttca | atggaagtta | agttaaaaaa |
| 840 | aaacaanaag | tcctttgagc | gggaaataat | ggcatataat | aaggtgtang | atattttaa  |
| 891 | g          | ttaaaaaatg | gccccaagcc | caaagcctaa | aaactactng | gctattaatt |

**<210> -21** - '.

<211> 873

<212> DNA

<213≻ Homo sapiens

| actcgtaact | cgcacccggg | tcctggctgc | accgcatccc | ctcctgcacc | ccctggatgg | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| cccttcagcc | aacgggggcc | tgggcgatgg | tcgaccacgg | agctgcgcaa | ggaaaagtcc | 120 |
| cgggatgcgg | cccgcagccg | gcgcagccag | gagaccgagg | tgctgtacca | gctggctcac | 180 |
| acgctgccct | tcgcccgcgg | cgtcagcgcc | cacctggaca | aggcctctat | catgcgcctc | 240 |
| accatcagct | acctgcgcat | gcaccgcctc | tgcgccgcag | ctggagctca | ttggacacag | 300 |
| catctttgat | ttcatccacc | cctgtgacca | agaggagctt | caggacgccc | tgaccccca  | 360 |
| gcagaccctg | tccaggagga | aggtggaggc | cccacggag  | cggtgcttct | ccttgcgcat | 420 |

gaagagtacg ctcaccagcc gcgggcgcac cctcaacctc aaggcggcca cctggaaggt 480 gctgaactgc tctggacata tgagggccta caagccacct gcgcagactt ctccagctgg 540 gagccctgac tcagagcccc cgctgcagtg cctggtgctc atctgcgaag ccatcccca 600 cccaggcaag cctggagccc ccactgggcc gaggggcctt cctcagccgc cacagcctgg 660 gacatgaagt tcactactgt gacgacaggg ttgcaaaaag tggctggcta tagtccgatg 720 acctgatcgg ctgttccgcc tacgagtaca tcaacgcgct ggactcccga cgcggtcaag 780 caaagaagca tccaaaaccc ttgctggagc aaaggggcca aggcagttaa caaggggcan 840 attatcgcct ttccttgggc ccgggaantt ggn 873

<210> 22

⟨211⟩ 779

<212> DNA

<213> Homo sapiens

#### **<400> 22**

atagagaaga acggaggtac ggcctgtggt catggcgctg ttcccagcct ttgcggggct 60 -tagtgagget eccgatggeg ggagetecag gaaagagtta gaetggetga geaacceaag 120 cttttgtgtt ggatccataa cgtccctgag ccaacaaact gaagcagctc cagcccatgt 180 ttctgaaggg ttaccgctga caaggagtca tctgaaatca gagtcttcag atgaaagtga 240 cactaacaaa aagctcaaac aaacaagtag aaaaaagaag aaagagaaaa agaaaaaaag 300 gaagcatcag catcataaga aaacaaagag gaagcatggg ccgtcgagta gcagcaggtc 360 tgagacagac accgattctg gaaaggacaa accttccaga ggcgttggag gcagtaaaaa 420 ggaatctgag gaaccgaatc aaggaaataa tgctgcagct gatactggac atcgctttgt 480 540 ttggcttgag gacattcagg ctgtgacggg agaaaccttc agaacagata agaaaccaga tcctgcgaac tgggagtaca agtctctcta ccgaggggat atagcaagat acaagaggaa 600 660 aggagactee tgeettggea ttaaccetaa gaagcagtge atatettggg aagggactte cacagagaag aagcattcac gcaagcaagt ttgaacgcta ttttactaag aagagtgtgg 720 779 gattaatgaa catcgatgga nttgncanta acagtaaaac tgaaacctcc ctcatctgg

<210> 23

<211> 856

<212> DNA

<213> Homo sapiens

<400> 23

| gcttcccgga | agtggcggcg | cggtcagggc | tggccttggc | ttcagctgcg | gttttggggt | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| cccggactct | gggatcggcg | gcgctatgag | ttctttcgag | gggcagatgg | ccgagtatcc | 120 |
| aactatctcc | atagaccgct | tcgataggga | gaacctgagg | gcccgcgcct | acttcctgtc | 180 |
| ccactgccac | aaagatcaca | tgaaaggatt | aagagcccct | accttgaaaa | gaaggttgga | 240 |
| gtgcagcttg | aaggtttatc | tatactgttc | acctgtgact | aaggagttgt | tgttaacgag | 300 |
| cccgaaatac | agattttgga | agaaacgaat | tatatctatt | gaaatcgaga | ctcctaccca | 360 |
| gatatcttta | gtggatgaag | catcaggaga | ggtttttatt | tcagggcaat | aatggaactg | 420 |
| tcctgtacac | aggagacttc | agattggcgc | aaggagaagc | tgctagaatg | gagcttctgc | 480 |
| actccggggg | cagagtcaaa | gacatccaaa | gtgtatattt | ggatactacg | ttctgtgatc | 540 |
| gaagatttta | ccaaattcca | agtcgggagg | agtgtttaag | tggagtctta | nagctggtcc | 600 |
| gaagctggat | cactcggagc | ccgtaccatg | ttgtgtggct | gaactgcaaa | gcggcttatg | 660 |
| gctatgaata | tctgttcacc | aaccttaagt | gaagaattag | gggtcaaggt | tcaatgttga | 720 |
| ataagctaag | acatgtttaa | ggaacaatgc | cctgagattc | cttcatcaat | ctcacaaaca | 780 |
| agaccggcaa | cactcaagan | tccaatgcaa | tgcccgggaa | tccccaaggg | caanaaggaa | 840 |
| ataattttca | agtggn     |            |            |            | •          | 856 |

<210> 24

<211> 740

<212> DNA

<213> Homo sapiens

<400> 24

cggcngaaga cggcctatgt gggccttttt ttttttttt ttatattttg agaaacctcc 6

60

| atactgtttt | ggcatagata | gtggctgcac | aattttgcat | tcccacccag | catacaaggg | 120 |
|------------|------------|------------|------------|------------|------------|-----|
| ttccaattcc | tccatatcct | caccaacact | cttttgtttt | tttgatagta | gtcatcataa | 180 |
| caggtgaggt | gatattaagg | agtacttctg | cactgaggca | cttgtctcaa | ctatattttt | 240 |
| gttgtacttt | caggagacta | atagatctgt | ggaaatttat | caaatctttg | ctcatttttt | 300 |
| taacttctga | gagctcttct | ttaatctgag | tgttcctttt | tatgaaattg | ttgatgaaaa | 360 |
| aagccgaaca | agtgtaaaat | attttaagag | atttattctg | agccaaatat | gagtgaccac | 420 |
| agcccatgac | acagccctca | ggaggtcctc | agaacatgtg | cccaaggtgg | ctaaggtaca | 480 |
| gcttagtttt | atatattta  | gggaggcata | agatatcaaa | tacatttaag | aaacacattg | 540 |
| gtctggttta | gaaaggtggg | acaactcaaa | gcaggggctt | ccagactata | ggtaaattta | 600 |
| aacattttct | ggttgacaat | aggatgagtt | tatctgaaga | cctgggatca | acagaaaaga | 660 |
| aatgttcang | ttaagataaa | ggattgtgga | gaccaagttt | cactgtgcaa | aggaagctct | 720 |
| canagagcag | acttcanaga |            |            |            | •          | 740 |

**<**210> 25

<211> 794

<212> DNA

<213≻ Homo sapiens

| accacccag tga  | aacccac agaaccat | gt acaccctcta | agtcccgaag | tgccagctca | 60  |
|----------------|------------------|---------------|------------|------------|-----|
| gaggaggcct cag | agtcacc tacagcco | gg cagatccccc | cagaggcacg | tcggctcata | 120 |
| gtgaacaaaa atg | ctggtga gaccctco | tg cagagggcgg | cgcgtcttgg | ctataaggat | 180 |
| gttgttctct act | gcctcca gaaagaca | gt gaagatgtga | atcaccgtga | caatgctggc | 240 |
| tacacagece tge | atgagge ttgttccc | gg ggctggaccg | acatcctgaa | catcctgctg | 300 |
| gagcacgggg cca | acgtgaa ctgcagtg | cg caggacggca | cgaggccagt | tcatgatgcg | 360 |
| gtggtcaatg aca | acctgga gaccatct | gg ctcctgctgt | cctatggggc | cgatcccaca | 420 |
| ctggctacct act | cgggtca gacagcca | tg aagctggcca | gcagcgacac | catgaagcgc | 480 |
| tttctcagtg atc | acctctc ggatcttc | ag ggccgggcag | agggtgatcc | cggtgtatcc | 540 |
| tgggattttt aca | gcagttc tgtgttgg | ag gaaaaagacg | ggtttgcctg | tgacctccta | 600 |

cataatcctc ctgggagctc agatcaagaa ggagacgatc cgatggagga ggatgatttc 660 atgtttgaac tctcagacaa gcctcttctc ccttgctaca acctccaagt gtcagttgtc 720 ccgcgggncc tgcaactggg ttcctcttt tccgaatgtc ttgaanaagg ctggaaagct 780 ttccctcnaa-gggt

<210> 26

**<211> 703** 

<212> DNA

<213> Homo sapiens

<400> 26

gaatettage tgattgeatt atgaactgte aaactgtgaa gatgacceat atgtaaacag ttataacagc tacagattat tgctagtagc attctataca attccatatt aatgttctta 120 ggagctaata tttgataaag gggaaagcta áttaaaaact aattaatttg tcaaatgtag cattettatt atgagtgtaa tateteatgg agatttaaat atgaacgaaa ggaettatee 240 ttctgctttt taaaagcccc agcattacta gatagtgttt ttcttgaagg ccaaagctgt 300 aaaatgacaa agttggtgat tttcagcagc actcacctga gctgtgagcg cctgcacctg 360 ttcggtagaa cccactagaa tcacttctct gtaggataag tgatgccttt gaatccagca 420 gcataaaaat ctgttctttt tagtcatcaa gtttttgttt ccaggatatt tctagcattg 480 caaaaaaaaa tttcttcacc aaacactaat tcctaaacac ccatccaaac cacaaaaatt ctcttgttag tangcgagag tgctaggact tcctgtgttc aactcccatg cacccagcan 600 tgtcttttat gcatgagata ttccattaga ttttcctaaa agtggcaagg acacccttca 660 tagtangtta tatcccttaa ctgggattcc aanagtttaa ncc 703

<210> 27

<211> 685

<212> DNA

<213> Homo sapiens

#### <400> 27

accetgtact tactcactat cataatttat gagaatgaca aatttttaga aataagcaaa tigacatete taactetgae tietetgiet aaactaetgi tgetigaatt teecaaaata 120 tetgaactee atatatetga acetaactea taacetetet ttggcaagee tgttgetget 180 ttcctatttt tactattcta tctcagggcc ttattcaaag ctcaagcctg gattatcagg 240 300 acagitting taaticacin cictacting tototoctic gaaaccatti tiacccacta 360 ccatgaaaat ggctctctag aatctttatc ggacaaaggt aaaatttctc aattcattat taccaacctt ctaaaatcca gcttcaatct gcctttcttc agactaacat ctcattatcc 420 cccacaaata ctggtctcac taatgttcct tgaagagctt gttttccagc ttccataact 480 ttgctctaaa tgcccaccct ccttggcaat actttccctc cttcacctat cctccaccca 540 gctttcangg ttggggtcag attccatgag gcacttactg atctctttgn cncaagggaa 600 tigitggcct ccicigiccc acteatetgg cattaatect aaggetgeet tatatetett 660 aaagggtatc cancttaaca catat 685

<210> 28

**<211>** 724

<212> DNA

<213> Homo sapiens

#### <400> 28 ·

gtcactgact aatccataat actaattcag cttctttgtc cgagtgggag ccagaatttt 60 aaaattgtta caggctaaaa tggtagagtc cacctgagct ggatgtgaag gggacaggga 120 gaaggagcaa gaagggaagt catcetteee cacagggete catgtgeete tgggtgcaac 180 tttgaacttt gaacctgaaa cttgcactgc tcccctccac tcccttctcc actttccccc 240 tectgeteag geeetgtgta tgtggaetge agetgggggt aagggaeaga ggetggtaet 300 ggggcaccag aggtcaaggg ggaagtgggg tgttgagcaa gagagagctg ttcttgtttg 360 420 gtactgagca aagcctacat ccacaagcag ttttctgtct ttccagattc ttgaactctt ctgtgggcaa ggagttcatg aactetttag aactggaage aacettagag ettttetage 480 tecatgiting taaactiting taagetaing aacactiact teaaatigat geaggatitit

| ccca       |            |            |            |            |            | 724 |
|------------|------------|------------|------------|------------|------------|-----|
| naaaagagaa | ggggtttcct | ccaaagcagg | gtttcccctc | ctcaanaagt | tttgaaatta | 720 |
| ggacacattg | aagggtgagg | caaggcaaga | atttagttaa | gcganaggga | aaactctcgg | 660 |
| tgctccttag | ttcagctaaa | tccaggttct | tgtctcacaa | ccaggaaaaa | ttagacatgc | 600 |

<210> 29

<211> 718

<212> DNA

<213> Homo sapiens

## **<400> 29**

| gttgaaaaca | gtttttgaat | agaacctgtt | gagtccacca  | atataataaa | atcagctgtt | 60  |
|------------|------------|------------|-------------|------------|------------|-----|
| tgtttttgaa | ataaatacat | atttatttca | atataataaa  | atcagctgtt | tgtttttgaa | 120 |
| ataaatacat | atttcaaaaa | gtataaaatt | ttagttgttt. | cagcgcttct | ttttactctt | 180 |
| gtgtcccagt | ttgcatgata | aattatatag | tattcacact  | ttaaagacat | ttctcataag | 240 |
| ttatatgaga | tttttctgct | tacatcctgt | tgaccagaat  | ttaattatat | agccatacct | 300 |
| agctgtaagg | gaagctagaa | aatgtaattc | ttattgtagg  | tcatcatgga | tccagccaaa | 360 |
| aatctggaag | atacagataa | aagatactag | gagacaagta  | acattctgcc | ctaccttctc | 420 |
| atcatgtgtt | tgcatttttg | gctagcacat | atactcatga  | ggtagacctg | cggaatttaa | 480 |
| gggagaaagt | agtatggtac | ctttaatatc | taatttatat  | tcatattttt | ttaaaagcta | 540 |
| aagtaaaaaa | tgaattgatc | ctattaagca | gatattagag  | aatcttgggt | caggcatggt | 600 |
| ggctcatgcc | tatcatccca | gtactttggg | agatggaggt  | gggaggatag | cttgagccca | 660 |
| ngagttggga | gaccagcctg | gggcaacata | gcaagaccct  | ggtctctaca | ggaanana   | 718 |

⟨210⟩ 30

<211> 906

<212> DNA

<213> Homo sapiens

## **<400> 30**

| agaactcccc | tgtttcccga | gtgcatagga | aagtgcttag | cattgaatgt | ggagcgatag | 60               |
|------------|------------|------------|------------|------------|------------|------------------|
| aatgaacaaa | gaaatgacaa | aatgactagg | tggatgaatg | catagcttaa | tatcagcgag | 120              |
| gcaggaagta | aacaaagaga | cactgagcac | caagtaattc | aatacaattc | atcatgagaa | 180              |
| cttatcttta | agctcctgtt | tcatgaggtt | agatactgtc | caacatggtt | cttacagcac | 240              |
| ttgttttagc | tgacagcact | ggcattcagt | gaaaattaça | gtgggcttga | gtatctttgg | 300              |
| aaataacggt | tttgcaaatt | tgattaccat | taaacagcct | ttataaaaca | cctacctgag | 360              |
| taggaatgga | gtatatatgt | tagccaagac | ttaattattc | atctcaggaa | ttggcacact | 420              |
| atctgttggc | taaagccatc | ttcctgtcta | cttaccttat | ctgtttttat | agagcccata | 480              |
| ttctaaaaat | gatttttaca | tttttatatg | tttggggaaa | aaaattcaaa | agaatgatac | 540              |
| atgataatta | catgaatttt | gaatttttt  | gcccaccaac | gaagttttat | tgggacacag | 600              |
| cccgggaaac | aacaacaaca | aaaatgatac | tgaaaataat | aaatctattt | atggacaaaa | 660              |
| gaataggagt | caaaaatang | gaggcaagag | agcacactgg | gaatttaggg | aaaaagaaag | 720              |
| aaaggnaatt | tttggngcaa | gaatcatcat | taatgggtgt | gatttgaggg | gatacatggg | 780              |
| taatgaacat | ttgctaantt | tttaaattac | acaaaatcca | tataaatatn | ttactttgat | <sub>2</sub> 840 |
| aaatataaat | atattaatat | ngttaaaaat | taaacacttc | caataacaaa | tcccttgaca | 900              |
| cngggt     |            |            | *          |            |            | 906              |

<210> 31

**<211>** 698

<212> DNA

<213> Homo sapiens

| gaggcccagc | ccgcgcggcg | acgtctccgc | gtggcgtcac | ggcaccgact | gacggccacc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| caccatggcc | gcagaccagc | gcccgaaggc | cgacacgctg | gccctgaggc | aacggctcat | 120 |
| caggtacccg | ggcggggggc | gggcggcggg | gggcgcgggg | ctgcgcggag | gggcacgcgc | 180 |
| acgcacgacg | cacgcacgca | cgcactacgc | acgcgcctcc | ggctaggaag | ccgctgctac | 240 |
| ccatcccgtc | cggccgctgc | cccggccccg | ctggagcttc | tagggcccga | ggcgggcggc | 300 |

gccgttggc agtcccgcg ggtggtctcc ggggccgcct ccccgacagc gccgtctcca 360 ggccgcccag ttcaggagac ggccccgccc tcaccgctgt tcggctgtgt cagcctcgct 420 tggcagcctt tactccggag aagaccttca ccctggcgcc tgagaggacc tcacccaggg 480 tggcccgtca gcagcactg ggcctggctc gagagtgacc tgggagggg ctgaaagggc 540 agacaaggga gagtcgggg agtcggttca caggcagcac acttgacctg tgagggggcc 600 ctcggtgga cggtggtga ggtcgctcc cactggaact taagggcttg gcacccagcg 660 aaggggcaan aaggaccaac gttggcttgg naaangga 698

<210> 32

**<211> 827** 

<212> DNA

<213> Homo sapiens

#### <400> 32

gactttggac tcacgtaggc ataggagaac gaaacttctg tacattttaa tctgaataat 60 tetteaggat ttaaaattaa ttggetetgg ettggttgga eegtaetegg atetegeeae 120 ctctgcgttt cccgagtcac tggcgaagag gtcccagttc ctctgggaat cgtcctgtat 180 gcaacatctt cacaagagtg gcaggcagtt gaatctctgg ccttcgtggg accactggac 240 atctggcaga gaaccaggaa accacggttc ccttctgtga gtccctcagc cggaaaacta 300 caageteete atgeagetge tgtetacaga ecceetggae tgeetgggga agtgagtegg 360 agctcctgca gcagagggt ggaacagcta cacgaagatc cgaaggtggc caaaaataac 420 480 agcgctttcc agatgaggga gccagttgtc cagcacagtg tcatgggaca gtgggccctg 540 gtgccacaat gcccggcatc tccaccagat acagctttga gatcttcatg atgaagcttg ctccaatcca agggctgtca ngtggggttt gcggttcagc tgctaacctt tctttgatca 600 aaatcctgtc ttcactggct tcaagaatct gtcttcactg gcttcaaaac tgggatgaag 660 720 gaggeteett antggagage aaageaaaga gaaacteaaa ttggnteata ttaaagaaga 780 gaaaggatgg atttgtttag acaacacaaa cctaggaagg gtttganaag tganacaagc 827 tggggttatg gatgaacggg ggcaattgga atgtngaaat tgaagca

<210> 33

<211> 849

<212> DNA

⟨213⟩ Homo sapiens

### <400> 33

| ctgagagaca | ctgcgagcgg | cgagcgcggt | ggggccgcat | ctgcatcagc | cgccgcagcc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| gctgcggggc | cgcgaacaaa | gaggaggagc | cgaggcgcga | gagcaaagtc | tgaaatggat | 120 |
| gttacatgag | tcattttaag | ggatgcacac | aactatgaac | atttctgaag | attttttctc | 180 |
| agtaaagtag | ataaagatgg | atgaatcagc | cttgttggat | cttttggagt | gtccggtgtg | 240 |
| tctagagcgc | cttgatgctt | ctgcgaaggt | cttgccttgc | cagcatacgt | tttgcaagcg | 300 |
| atgtttgctg | gggatcgtag | gttctcgaaa | tgaactcaga | tgtcccgagt | gcaggactct | 360 |
| tgttggctcg | ggtgtcgagg | agcttcccag | taacatcttg | ctggtcagac | ttctggatgg | 420 |
| catcaaacag | aggccttgga | aacctggtcc | tggtggggga | agtgggacca | actgcacaaa | 480 |
| tgcattaagg | tctcagagca | gcactgtggc | taattgtagc | tcaaaagatc | tgcagagctc | 540 |
| ccagggcgga | cagcagcctc | gggtgcaatc | ctggagcccc | ccagtgaggg | gtatacctca | 600 |
| gttaccatgt | gccaaagcgt | tatacaacta | tgaaggaaaa | gagcctggag | accttaaatt | 660 |
| cagcaaaggg | cgacatcatc | atttttgcna | aagacaagtg | ggattgaaaa | ttggtancaa | 720 |
| tgggggaaat | caaatgggat | ccaatggctt | tttccccaac | aaacttttgt | gcaagattta | 780 |
| ttaaaacccg | tttacctcaa | gccccaacc  | tcaagtggca | aaangcnact | tttaaggaac | 840 |
| ttttgaaan  |            |            | •          |            |            | 849 |

<210> 34

<211> 245

<212> DNA

<213> Homo sapiens

**<400> 34** 

tactaaatga tgtttatttc actatatccc atgtgctctg actctgagac ttcaaggttt 60

gaagggggct aaacatgaaa tacaagttcc cctggaattc agactggttg aatccaagca 120 gtttcactgg ccaagaaaac tttatgtttt ggccgggcac agtggttcac gcctgttaat 180 gccagcactt tggaaggctg aggcgggcgg atcccctgag gtaaggagtt ggggacatcc 240 nngnc 245

<210> 35

<211> 820

<212> DNA

<213> Homo sapiens

<400> 35

aatcagctat ttcatgcagt gcaaagattg caaagagtac aaaaccagct gaaaagcatg 60 cgccaagctg cagcagatgc aaagcctgaa agtttaatga agaggctaga ggaggagata 120 180 aaatttaatt tatatatggt aactgaaaaa titcctaaag aattagaaaa taagaaaaag gaattacatt ttttacaaaa agtagtttca gagccagcta tgggccattc tgatcttctt 240 gaacttgaat ctaaaataaa tgaaataaac acagaaatta accagttgat tgaaaagaaa 300 atgatgagaa atgagcccat tgaaggcaaa ctctcactgt ataggcaaca ggcatctatc 360 420. atttcccgta aaaaagaagc caaagctgag gaacttcagg aggccaagga gaagttagcc agcctagaga gagaagcatc agtaaagaga aatcagaccc gtgaatttga tggtactgaa 480 gttttaaagg gagatgagtt caaacgatat gtcaataaac ttcgaagcaa gagtacagtt 540 600 ttcaaaaaga agcatcagat aatagctgaa cttaaagctg aattcggtct tttgcagagg actgaagaac ttcttaagca acgtcatgaa aatattcaac aacaactgca aactatggag 660 gagaaaaagg gtatatctgg atatagttac acccaagaag agctagaaag agtatctgca 720 780 ctgaagagtg aaagttgatg aaatgaaagg gacgaacatt gggtgatatg tccgaaaatg 820 gggaaaaaaa actgtattca atggnaanct naaaaaggaa

<210> 36

<211> 884

<212> DNA

### <213> Homo sapiens

### <400> 36

| gttgacccgc | ggcgttcacg | ggaactgttc  | gctttagtgc | cggcgccatg | gggtcggagc | . • 60 |
|------------|------------|-------------|------------|------------|------------|--------|
| tgatcgggcg | cctagccccg | cgcctgggcc  | tcgccgagcc | cgacatgctg | aggaaagcag | 120    |
| aggagtactt | gcgcctgtcc | cgggtgaagt  | gtgtcggcct | ctccgcacgc | accacggaga | 180    |
| ccagcagtgc | agtcatgtgc | ctggaccttg  | cagcttcctg | gatgaagtgc | cccttggaca | 240    |
| gggcttattt | aattaaactt | tctggtttga  | acaaggagac | gtatcagagc | tgtcttaaat | 300    |
| cttttgagtg | tttactgggc | ctgaattcaa  | atattggaat | aagagaccta | gctgtacagt | 360    |
| ttagctgtat | agaagcagtg | aacatggctt  | caaagatact | aaaaagctat | gagtccagtc | 420    |
| ttccccagac | acagcaagtg | gatcttgact  | tatccaggcc | acttttcact | tctgctgcac | 480    |
| tgctttcagc | atgcaagtag | gtatttcatt  | aaacattcag | aaaagttacc | aatttacaag | 540    |
| tgggtttttc | atccccaagg | aatacttcta. | acttagttga | tatcaattca | gagcatattt | 600    |
| tcccctagaa | ataatattag | gaatattggc  | caagtgacta | tattcccaag | tttatcccat | 660    |
| aatgtancta | acaacttgga | actagtgttg  | ccaagaattc | cactagcaaa | tagcagctgt | 720    |
| atatatatgc | tgggaantct | gatttcantc  | tgccttttgt | aagagatgat | atctgtcatt | 780    |
| aaaaacagtc | ctcacaatga | gaattttccg  | gctcaaaatt | ttttaaaaaa | ggtactgggt | 840    |
| tggggccaan | gcngtgggtg | ggtncccgcc  | tggtaatccc | caaa       |            | 884    |

<210> 37

<211> 917

<212> DNA

<213> Homo sapiens

#### <400> 37

aatatcagaa gagagcaatc aaggtagctt attaactgtg ccaggagata ctagtccttc 60 tcccaaacct gaggtattct caaatgtgcc tgaaagagac ctttcaaatg tatctaacat 120 acattccagt tttgcaactt ctccaactgg agcttcaaac agcaagtatg tttcagctga 180 tagaaatctc atcaagaata ctgccccagt gaacactgta atggacagtc cagtgcattt 240

agagccatct agtcaggttg gtgtgatcca gaataaatca tgggagatgc ctgttgatag actagagaca ttaagcacca gagactttat ctgcccaaat tctaacatac ctgatcaaga 360 atcctctctt cagagttttt gtaattctga aaataaggta ttgaaagaaa atgctgattt 420 tttatecetg egecagaetg aactgecagg aaactettgt geteaggate eggeateett tatgcctcca cagcagcctt gctctttccc cagccaatca ctttcagatg ctgaatcgat ttctaaacat atgtctttgt catatgttgc taatcaagag ccaggtattt tacaacaaaa 600 aaatgcagtt cagattatta gttctgcttt agatactgat aatgaatcta caanaagata 660 caagaaaaat acttttgtcc taagagatgt tcaaaaaaaca gatgcctttg tcccagtgta 720 ctcctgacaa gcactattca agaagcatca ccaaaacttt gagatanctt atactttacc 780 tgtgttacca tcangaaaan ggactttaat gggaagtgat gcctccaacc aagctaaatt 840 cacattatgc atttaacaaa ctaacttaaa gtcctccagt ggncatgaag ttgggatanc 900 acaactggta cccaagg 917

<210> 38

**<211> 743** 

<212> DNA

<213> Homo sapiens

#### <400> 38

tctattattg atttcttatt taattttggt atagccagag aacaccattt atgtggatga 60 teteggetea ceacaacete tgeeteetgg gtteaageag tteteetgee teageeteee 120 gagtagctgg gattacaggc atgtgccacc atgcacggct agttttgtat ttttagtgga . 180 gatggggttt caccatgttg gtcaggctgg tcttgaactc ccgacctgag gtgatccact 240 gcctcagcct cctaaagtgc tgggattaca agtgtgagcc accacgcccg gccttgtgtg 300 gttttaattt attaaaaatt gttaaagttt actttatgac ccagaatatg atctatctgg 360 420 gtatatgttc tgtgggcact tggaaagaat atgtattctg ttgctcttga gtagagtgtt 480 ttataaatgt ccgttatatt aaaccagttg ataatgttat ccaggtttta tatatccttt ttgatttcca tctatttgtt tatcagttat tgagaacaga gttattgaag tctcccagtt 540 atgactgtgg attiticcat gictitita gitcialicaa tilligciic attiattitg 600

| ggatctttgt | tagttgcata | ctanatttca | gtgtttatct | tcttggtgaa | ttgacccttt | 660 |
|------------|------------|------------|------------|------------|------------|-----|
| tatcantatg | taacttccct | aaatttagat | cttaaantta | aaatagattt | ccttaaaacc | 720 |
| atangacatt | tgagaaggta | aac        |            |            | -          | 743 |

<210> 39

<211> · 707

<212> DNA

<213≻ Homo sapiens

<400> 39

| cccaacatc  | t gtgctgatcc | tgctaggtaa | tgacgcccct | tccttatcgt | tctagagtca | 60  |
|------------|--------------|------------|------------|------------|------------|-----|
| agcctagat  | c ccctacaaat | acccatgcac | acttagagct | cactctggtt | aaatgttcca | 120 |
| agaaggatg  | t tggatggtca | cttggtatca | tcccatggag | ttcaggatac | cccgccctc  | 180 |
| tgagcagcc  | a ttcctctcct | gagcacattc | ccctagagaa | gctctgcacg | tgtgcacagg | 240 |
| caccagetg  | c aggagtgcca | tccacagcac | agctgtttat | gaaaaaccgt | aatcaaccca | 300 |
| aacatctgt  | a tgaagaaaaa | cgaagaaatg | cagagtggca | tgttcacatg | atggaatact | 360 |
| atgcagctg  | a gaacatgaac | aattggagcc | atggcatgaa | tgaagctgag | agatttgaag | 420 |
| cgtcaacca  | a gtaagctgta | ggagattaca | tgtggtggaa | gactagttta | taaatctcac | 480 |
| agacaagcc  | t taaagaaaat | gtatctcttg | aaataaatgt | atacacacaa | ttatacacat | 540 |
| atatatgata | a aaccctttta | aaaggcaagg | gaatgatcaa | taaaaacata | aactgttccc | 600 |
| tctggggca  | a aggcggangg | caaggcatca | agatnaacaa | ggaagttgat | ctgggttttg | 660 |
| aatttgggg  | t tgtgtgtgca | ctgggagtca | aacanttatt | tttacag    |            | 707 |

<210> 40

<211> 752

<212> DNA

<213> Homo sapiens

<400> .40

| agtgcgcgtg | cgcgtgccct | cctggggcgt | gctcgcggct | ataaggggcg | gaggctgggc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ggcgttgctc | tgcgctctgc | ggctgacggc | gcttttgtct | ccggtgagtt | ttgtggcggg | 120 |
| aagcttctgc | gctggtgctt | agtaaccgac | tttcctccgg | actcctgcac | gacctgctcc | 180 |
| tacagccggc | gatccactcc | cggctgttcc | cccggaggtg | agcggccctg | tgggcttccc | 240 |
| cggctcccca | ccccatcgc  | tagagtgctc | gccgcgctag | cagcctcgcg | ttccagggct | 300 |
| gggggtgcgc | cgccgggatc | ctctctgatc | gcccacgccc | catctggggt | ccccattcag | 360 |
| ccgtcagccc | tgttttgtcc | taaggtggtc | ctaactagga | tccacgtggc | ccatcccacg | 420 |
| cccacaggtg | ctgagttagg | caccctgcc  | atgccctccc | agagcacctt | cacgatetee | 480 |
| ttgctgtccc | aacacttagc | gtgttgcgtg | ttaactaccc | tttgtctata | aggtttgcaa | 540 |
| tgtggcccta | gtatcttcca | gggtacctaa | cacattgcag | atattcatgg | tatgtttgtt | 600 |
| aaataaatga | acttgataga | tttgaccctc | aaanagttat | ttggacttgc | aaaaagtttg | 660 |
| tagttaactc | caatctgtga | tgtgggaaaa | gacttctagg | cangttcctt | tctcaagggg | 720 |
| natgttctta | tattttccaa | taaccaacaa | nc         |            |            | 752 |

<210> 41 .

<211> 545

<212> DNA

<213≻ Homo sapiens

| Ć | ctcgaccctg | gacgtctacc | ttccggaggc | ccacatcttg | cccactccgc | gcgcggggct | 60  |
|---|------------|------------|------------|------------|------------|------------|-----|
| 8 | agcgcgggtt | tcagcgacgg | gagccctcaa | gggacatggc | aactacagcg | gcgccggcgg | 120 |
| ٤ | gcggcgcccg | aaatggagct | ggcccggaat | ggggagggtt | cgaagaaaac | atccagggcg | 180 |
| ٤ | gaggeteage | tgtgattgac | atggagaaca | tggatgatac | ctcaggctct | agcttcgagg | 240 |
| 8 | atatgggtga | gctgcatcag | cgcctgcgcg | aggaagaagt | agacgctgat | gcagctgatg | 300 |
| C | cagctgctgc | tgaagaggag | gatggagagt | tcctgggcat | gaanggcttt | aagggacagc | 360 |
| 1 | tgagccggca | ggtggcanat | cagatgtggc | aggctgggaa | aagacaagcc | tccagggcct | 420 |
| 1 | tcagcttgta | cgccaacatc | gacatcctca | gaccctactt | tgatgtggag | cctgctcagg | 480 |
| 1 | tgcnaagcag | gctcctggag | tccatgatcc | ctatcangat | ggtcaacttc | ccccanaaaa | 540 |

ttgca 545

<210> 42

<211> 791

<212> DNA

<213> Homo sapiens

<400> 42

tacaactgct atataaaata tttacctgaa acaaaagttt cagaaaacgt ctttaatagg 60 tgtagtgtac tctttttatt ctattaatta aaaagttggt tacaattgct aaaggatttc atgacttagt ttgaataaaa ctaagtaggc caggcgcagt ggctcacgcc tgttatccca 180 gcactttggg aggccgaggc aggcagatca caaggtcaag agatcgagac catcctggcc 240 aacatgggga aactccgtct ctactaaaaa tacaaaagtt agccgagcgt gatggtatgc 300 acctgtaatc ccagctactc gggaggctga ggcaggagaa tcgcttgaac ctgggcggca 360 gaggttgcag tgagtcaaga tcacgccact gcactacagc ctggacgaca gagcaagact 420 ctgtctcaaa aagaaaanaa aataaagtaa ttcagcccta tctctcccag cagaggtaga 480 aacagagggc ctgaggcttg catggcttaa cccgaaaaaa tcagcgcctg gaatagaagc 540 tagatttttt cctaatctgc tctctaccac cttgcatctg ttactgtatg aattcctctg 600 gaagtgette tgttaagaca gacatgttea agtangtgtt cagtaettat tgggtateat 660 aaatatgttt acattgagaa aaaatggcta tgaagggaga gttgagatga cagaaatgta 720 catagtcaaa atcagnctct gggtgctggg ttgaaatatg antgaggana gttggggcat .780 791 ctgggttagc a

⟨210⟩ 43

**<211>** 683

<212> DNA

<213> Homo sapiens

| aataaataat | aatcttgtac | tctcaaaact | ctcagatctg | ctgctttaat | ctacctttca | 60    |
|------------|------------|------------|------------|------------|------------|-------|
| tatttgtgcc | agaattttct | tttgtttttc | aataacctat | tttaaaccac | agtttcttca | 120   |
| ctaaaacttt | catctttttt | ttatttttct | ctttatcaaa | atacaacttg | actctgaagg | 180   |
| ccttttataa | agtagctcag | tgttttctaa | attgtgtttt | agaatgctgg | ttccaaaaaa | 240   |
| tattaatagg | gatttcctgg | gggaaagagg | cacaaccaaa | ctccaggata | tgctggttta | 300   |
| tgcagtttgg | aacttctctg | gtacttcaag | gtgctaataa | gggctgaatc | taaatgtggc | 360   |
| tagtgttttg | tcctctcatt | tcacaaaact | ccctttagtg | gaacatctca | ccttgttaac | . 420 |
| tttgtgtacc | aggatcactg | ctttgcacaa | ctccagggga | cgctgttcac | atacaacaca | 480   |
| gaatgaattg | tgtttcctgg | agttgagagc | tgtgttgcat | actgtagtat | tgctgactgt | 540   |
| ccactgtgtg | acggtcttag | agtctggtgg | tccctcatcc | ttttgttgtg | aatgtgtang | 600   |
| tgtttttcct | ctcacctgat | angaccetta | ngggccagat | gctgtgcttg | atgcctataa | 660   |
| gtcctagcac | tttgggaggc | tga        |            |            |            | 683   |

<210> 44

<211> 761

<212> DNA

<213≻ Homo sapiens

| aaagacaatc | gcggccaccg | ccaggtggaa  | cggcaggtgg | gttcaggtac | cagcctggcc | 60  |
|------------|------------|-------------|------------|------------|------------|-----|
| gggacccggc | tgtgggacca | acgcttccgt  | tccccattcc | cctaccgagc | tgggcagtta | 120 |
| gccagcccac | tccaactctc | ggaaccatgt  | ttgcagactt | ggattatgac | atcgaagagg | 180 |
| ataaactcgg | aatcccgact | gtgcctggga  | aggtgaccct | gcagaaggat | gctcagaacc | 240 |
| tgatcgggat | cagcattgga | ggaggggccc  | agtactgtcc | ctgcctctat | atcgtccagg | 300 |
| tatttgacaa | caccccagca | gccttggacg  | gcacagtggc | agctggcgat | gagatcaccg | 360 |
| gtgtcaatgg | caggtcaatc | aaagggaaaa  | ctaaggtgga | ggtggcgaan | atgattcagg | 420 |
| aggtgaaggg | ggaggtgacc | atccactaca  | acaagctgca | ggcggacccc | angcagggca | 480 |
| tgtccctgga | cattgtgttg | aagaaagtca  | agcaccggct | ggtggagaac | atgagttcag | 540 |
| ggaccgcaga | tgctctgggc | c.tgagccggg | ccatcctgtg | caatgatggg | cttgtcaaga | 600 |

ggctanagga gctgggagcg gaccgctgag ctatacaaag ggattacggg acacaccaag 660
aacctcctac gggncnttta tgagctgtcg cagactcacc gggcctttgg gggacgtgtt 720
ctcccctgat cggggtgtcg ggaagcccca ancaatcttt c 761

<210> 45

⟨211⟩ 757

<212> DNA

<213> Homo sapiens

#### <400> 45

ccttattttt ttaatgcagt aatagatatt tgaataatag ctttactgag atataattca 60 cataccatge aatteaceea tttcagtggt ttgtaggata etcagacttg tacgaccate 120 actacaccag ttttagagge tttaatcacc ccaaaataaa ccctgaaccc cttagtcatt 180 gtetetaaat tececeacee etcaceeet ggaaateaet aatgteeatt gtgtetetat 240 ggatttgcct atcctgaata tttcatatac ggtaaacgga atcaggtaat atgtgatctt 300 ttatcactgg catctttcac tgagaataat gttttcaagg ctcacacacg atgttgaatg 360 catcagaact ttgtttcttt ttatgggtga ataatattcc attgtatgca tagaccacac 420 tetgtttete catteattaa tggatgeatg etaggattae etteaettge tagetettan 480 gaatagtgct gctgtgaaca tttgtgcatg ggtttttgtg tggacttacg tttcatttat 540 cttgggcaca tacctagagc nggnttgctg agtaactcag tgtttaacat ttttgaggaa 600 cagccaagac tgttttccaa agcaagctgt ancatttcac attcccacca gcagcatatg 660 agggntcttg atttccccac gnttagttag tgttaagtga tacctcactg tgggtttggc 720 ttccattttt ctgatggggn aatgagggtt gagcaac 757

<210> 46

<211> 747

<212> DNA

<213> Homo sapiens

## <400> 46

| tatctgatga | ccatgtcctc | atcctgccta | ttggacacta | ccagtcagtg | gtggagcttt | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| cagcagaggt | ggtagaagag | gtggagaagt | ataaggccac | tctgagacgg | ttctttaaga | 120 |
| gtcgagggaa | atggtgtgtt | gtatttgaga | gaaattataa | gagccatcac | ctccagctac | 180 |
| aggtcattcc | tgtcccaatc | agctgctcta | ctactgatga | cattaaagat | gccttcatta | 240 |
| ccçaggcaca | ggagcagcag | atagagctgt | tggaaatccc | agagcactct | gacatcaagc | 300 |
| agattgcaca | gccaggagca | gcatattttt | atgttgaact | tgacacagga | gaaaagcttt | 360 |
| tccacagaat | taaaaagaat | tttcctttgc | agtttggaag | ggaggtcctg | gccagtgaag | 420 |
| ccatccttaa | tgttcctgat | aagtctgact | ggaggcagtg | tcagatcagc | aaggaagacg | 480 |
| aggagaccct | ggctcgccgc | ttccggaaag | actttgagcc | ctatgacttt | actctgggat | 540 |
| gactaaaaca | aagggaagaa | ctttttatga | actccacagg | aagtagtaaa | gcttttttt  | 600 |
| ttttttaatt | aaaagaattt | tttttgagac | gggagtctcg | ctctgtcacc | caagcangat | 660 |
| tgcantggca | taactgtggc | tcactgtanc | ctcaacctcc | tgggctccgg | gagttcctcc | 720 |
| caactcagcc | tcaatgaatg | gctggga    | •          |            |            | 747 |

<210> 47

<211> 721

<212> DNA

<213≻ Homo sapiens

| aaaaaaaa  | a aaagattgtc | aaccgggaga | aagaaatcct | gtcaaattag | ttccaggaag | 60  |
|-----------|--------------|------------|------------|------------|------------|-----|
| ggtttgctc | a ggattggtgg | tatgagaatt | taactttaga | aacggttctt | gtgactgtga | 120 |
| agtccttgc | t attggatctc | ttctaaatgt | actgttggca | caaagcaaga | tggcctcatg | 180 |
| aagattcac | a tcatgactta | tagcctggct | gaagtttacg | tgataatgtg | ctgaagaatt | 240 |
| catgccatc | a ctgatactgc | ctggaagagg | agtatetece | aatgagaagc | cctccgtgaa | 300 |
| ttttcaggc | t gtgatgaaag | caactggaat | aagtcttcca | gagagaaata | agtatctgtc | 360 |
| ccattcaga | t gtctctcatt | tctagattca | gtggtctttt | ctgcctccca | atcaggttcc | 420 |
| tctgctatt | t tgttttcatc | atcattattc | tgctgaagtg | agttctcctt | ctgggctgac | 480 |

| accctttctt | cattttcctc | acgctgggaa | ctatgatcca | cagcttcgtg | cttttctctt | 540 |
|------------|------------|------------|------------|------------|------------|-----|
| agtacctcgt | tctccccgct | cgcacatccg | ccagcgtccg | gcacctgagc | cgtcggttcc | 600 |
| gcgggtgcct | tctcctcttc | cccggggtnc | aaggggccac | tccgagccgc | tcgggagtcc | 660 |
| ccgcagcccc | cctgcanagc | ctgggctggc | cgccgtccac | nctgggcgcc | gggctccctc | 720 |
| <b>c</b> , |            | •          |            |            |            | 721 |

<210> 48

<211> 705

<212> DNA

<213> Homo sapiens

## <400> 48

| 1   | gaaaagagat | gcaccatttt | cttcttgttc | tttggataag | ctaagctcat | tcccatcttg | 60  |
|-----|------------|------------|------------|------------|------------|------------|-----|
|     | gagctgttgc | actggccctt | gtgtggctgg | tccctcctca | tcaccagggt | cccagctcca | 120 |
| 1   | atgtcatctt | ctctgagaag | ccgtccctga | ccaggcttag | ttgcttccca | ccccagcctg | 180 |
| . : | acacactcca | gcccatcacc | cagtcagtgt | tatttgcttc | atttttacat | tatggtctaa | 240 |
|     | aattaacttg | ctagtttact | ggtttactag | tttattatct | gtctccttcc | attatccctc | 300 |
|     | tccttccctc | cttcccttcc | ccttccttcc | ttccttcctt | ccttccttcc | ttccttcctt | 360 |
| 1   | cgagacacag | tcgtactctg | tcacccggc  | tggagtgcag | tggtgtgatc | ttgcctcact | 420 |
| : ; | acaacccctg | cctcctgggt | tttagcgatt | cttctgcctc | agcctcccga | gtagctggga | 480 |
| 1   | ctacaggcac | ccaccacgat | gccaggctaa | tttttgtatt | tttattggag | acagggtttc | 540 |
| ;   | accatgttgg | ccaagctggt | ctcgaactct | tgacttcaag | tgatccacct | gtctcggcct | 600 |
| (   | cccaaagtgc | tgggattaca | ggcatgancc | actgcacctg | ggccctttta | ttattcanag | 660 |
|     | taaggacaca | caggggacca | acaattggtc | nccttccaac | tccag      | •          | 705 |

⟨210⟩ 49

⟨211⟩ 548

<212> DNA

<213> Homo sapiens



## <400> 49

| gtgataggat | gttaaccacc | atgataaaaa | cttacaaaag | aataaaaatc | actaggaaat | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| cagatgagaa | cgagaaagaa | ataaaatctt | atcattacaa | aaaccaccaa | actgcaaaga | 120 |
| tagacactaa | gagaggaaga | aaggaaaaaa | ggatatacaa | aatgacaaca | aaataaaaat | 180 |
| catatcaagt | atcttctcag | accacagtga | aactagaaat | taataccaag | aataactttg | 240 |
| gaaactatac | aaactcctgg | acacatataa | cttaccaaga | ctgaaccaag | aagaaataca | 300 |
| aaacatgaac | ggaccattaa | tgagtaacga | gattgaatga | gtaataaaaa | gtccccaac  | 360 |
| aaagaaaaga | ccaggactgc | atggcttcac | agctgaattc | taccaatctt | taaaaagaaa | 420 |
| aaatactaac | tcttctcaaa | ctattccaga | aacttgaagg | cggggggtgt | gggagtggaa | 480 |
| tttgtccaaa | ctcattctat | gaggccagaa | ttaccctgac | accaaancca | gacaaggnca | 540 |
| caactaan   |            |            | •          |            | •          | 548 |

<210> 50

<211> 680

<212> DNA

<213> Homo sapiens

| •          |            |            |            | •          |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| ggacatttta | tccttaaaaa | aaagaaaaaa | aaagaaaata | tttaattttt | aaataccaat | 60  |
| ttttagagta | agaaattggt | ttgatagtta | tctctaatag | tgtcaaatga | gtatttttt  | 120 |
| tcctttttct | cttttttgaa | tatcatggac | tttggatgtt | ttaaaatcca | atattttacc | 180 |
| ctcagttaca | gtcactattc | atttttatt  | gagatataat | tcagatacca | taaaattcac | 240 |
| cttttaaaac | atacaattca | acatctaaaa | atgtattcac | aaagttgtgg | aaccaccact | 300 |
| actatctact | tccagaatat | tcatcccctg | ccccctgaa  | agaagccctg | ccctcttcag | 360 |
| caatcacacc | ccattactcc | ttcccttcag | ccgcaggcaa | ccgctcacct | gctagttctg | 420 |
| tcttgcagat | gtgcctgttc | tggacatttc | gtataaatgg | aatcagacaa | tatgtggcct | 480 |
| ttcatgtctg | gcatctttca | gcacagtgtt | tcgaggttca | tgcatgtttg | tagcacttca | 540 |
| tttctaatat | tccattggat | ggatatacca | cattttgtac | atcagttgat | ggatacgtgt | 600 |



| acgttttana  | tggaacagtt | cccatggctt | ttccactc | aa | gttaggggtt | cctggggtta. | 660 |
|-------------|------------|------------|----------|----|------------|-------------|-----|
|             |            |            |          |    |            |             |     |
| aagccaaggt. | anggnaaaaa |            | •        |    |            | •           | 680 |

**<210> 51** 

<211> 788 <sup>1</sup>

<212> DNA

<213> Homo sapiens

## <400> 51

| ggaatttaaa | attettaaaa | atactctaat | agccitgagi | gaccaacttt | lllllaaag  | ומ  |
|------------|------------|------------|------------|------------|------------|-----|
| cacagatgta | attgtctaat | gttctgatgg | gaacgtaaca | cttattttta | tataaaaaga | 120 |
| gactgagtaa | acaaacatta | tagaaaaaaa | gtgaagtttt | ttagttgttt | tttgtggtat | 180 |
| tcaaccagca | agttgttttc | tttcagagtt | tcctccttca | aaaagttata | ttgcatttac | 240 |
| aaatgtttta | caaggcagaa | agtttgactg | gatagttagt | gtaaaagctt | catgttgaga | 300 |
| tcttcacgta | tcattctgct | aaaccagaat | atgttcagct | gtgttactaa | tttttcagct | 360 |
| taatcctcag | tgcttattat | ttacataaca | ataacttttt | atcagttaca | ttttattttt | 420 |
| atttaaactg | gccaaaagca | aaattatttt | atgttaaaat | gtgtgctaaa | ctatcccagg | 480 |
| aaagtattta | atccaacatt | gtaaatgaag | tatcttgtac | atataaattt | atttcttttg | 540 |
| cagagcatta | tattactgga | tgtttaattt | acaaaatagt | tgggtaaatg | ttccaacaaa | 600 |
| ctttaaagta | ccttgaagtc | aaattgtctg | tttttgtttt | gttgttgttg | ttggccgttt | 660 |
| tcctaaggtg | gttacattaa | aactcctaac | caagggaaag | ggttctttaa | ggaacaattc | 720 |
| ccttaagggg | gataaaagtt | gaaaaaagtg | gtgccntttt | ttttaanggg | cttgaaagtt | 780 |
| tcanaggg   | •          |            |            |            | ,          | 788 |

<210> 52

<211> 718

<212> DNA

<213> Homo sapiens



<400> 52 ·

gatcgcgttt ttccttgatt gtgcggctct gaatacagaa cagctgttag ccttgagttc gttcctatgc ttgtatctca acaccgactt ccacgtgaag cgggtactga gcgtgggttt 120 tgacgttcaa gagtgttaag taagcctggg caacctaggg aggcccgatc tctacagaaa 180 aaccaattag cccgacatgg tggctcccgc ctccagtccc agctactcgg gaggctgagg 240 tgggaggatt acatgagccc gggagttggg agctgccatg agctatgacc atgccactgc 300 actccagccg gagccacagt gagtctgcct caaaaaaaagt gcagtggctg gaactccacc 360 aacattaaca gagatteact ggetetteag agaateacag gggtgaagae aagatteagt 420 gacaggacg gtgtcaacag cccaccgagt tgaattgggt gtcttgtgta atagccctga 480 gcctggagca tagcagggc cagaacgacc tcaaagtaca gaggaggcct tggagcttcc 540 tgctggaggg atacatgggc tagacagagc tttggaaagc ttcctcctcc aagggcccan 600 ccggaggagc aagaagatgc tggtagcctg acttagtgaa agagggacca gctcaagtat 660 718 ggggtgacaa gacancaanc cttttaaggg gggaaaggga ctaaggctgg ttaatgan

<210> 53

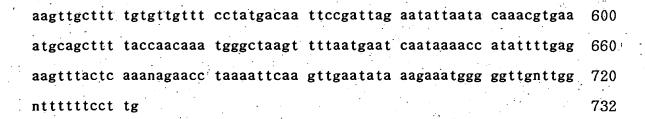
**<211> 732** 

<212> DNA

<213> Homo sapiens

#### **<400> 53**

tcaccaattt ggctggtctc gactcctggc tggtctcgac tcctgacctc aggtgatcca 60 cctacctcgg cctctcaaag tgttggagtt acaagcatgg gccaccgcac ccggcctatt tataattttt tgaggaaact ttgtactttt tcccatagct gtaccatttt gcatttccac 180 ctacagtgtt caagagttcc agtttctcca catccttacc aatacttgtc ttttttttt 240 tttaatggcc atcctggcag atgtaaggtg atatttcatc acagttttga tttgcatttc 300 360 cctgataact aatgacattg gactttttt tatatatctg ctggccacct gtatgtcttc tttggagaaa catctattca agtttctagt tcatttttaa attggattat ttgctttttg 420 ctattgagtt gtttgagttc cttatctatt ttgaagctta accctatatc aaatgggatt 480 cttatatttt tgtttcatat tttgtagtat atcaggtcca tgaaattagc tatcttaagt 540



<210> 54

. <211> 820

<212> DNA

<213≻ Homo sapiens

### <400> 54

| tatatggttt | tgtgtaagca | gttaatgtaa | atattgttag | cattacaggt | catacagtgc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tgtaacattt | ttttaaatgt | tgcacctact | ttacaattaa | aaaattggtc | actcgcactt | 120 |
| caattttgcc | catagagcca | tttctttgtc | tttgtattga | agccaattca | ttttttaaa  | 180 |
| tgaaggctag | gccttctatg | ttaccaaaat | ttttattccc | taaaataaac | tttttaagaa | 240 |
| acaaatccaa | gaatggaaac | agatgaaaaa | ttttttttt  | ctttaaagaa | cataatagtt | 300 |
| cctgctggaa | aaggaaatct | aattttattt | tgtgtccctt | aacagtccta | ggaagcacaa | 360 |
| ggagaataaa | ctaaacctct | aagaaggttt | taaaaattat | ttcaaatgag | tgaaaattaa | 420 |
| ctgagcagct | tttgtgtgat | ttgtcttgtt | tgtagcatta | aaagcaaacc | agggtttta  | 480 |
| tttatttaaa | ggaacatttt | tggcttgtac | ttttcagtgc | cattatgaat | gaaaatgttt | 540 |
| taagaacatt | catcccttgt | gatatcatgg | gccactttta | gtcttttatt | tggaccctga | 600 |
| ctttgagttt | ttgctatgcc | tgtttttaa  | gtaaacacag | ccttcttatc | tgaacgtaac | 660 |
| actgcagaat | tgcaggaaga | gaaaagggca | agttagttan | ttcactttct | gtaagtttta | 720 |
| gggaagantc | ctaaaatcct | acgaaggtga | ccccaggttt | tcattttaga | ccaatgatag | 780 |
| cacattggtg | gtnaaacttt | tgggaaancc | ttccaatgca |            |            | 820 |
|            |            |            |            |            |            |     |

<210> 55

<211> 776

<212> DNA

## <213> Homo sapiens

# <400> 55

| ttaaataatt | agaatttcan | gatcggtcaa | aatactttgg | catctgaaag | caggagetta  | 60  |
|------------|------------|------------|------------|------------|-------------|-----|
| gaaccagaat | tccttctcag | acataatccc | agcatcccca | gcccagtgct | tttgctcttt  | 120 |
| cgcaccaggc | cagataactc | tgtgatcatg | gacgtatgca | ggaatttgta | aatatttggt  | 180 |
| ggatgatagt | cagattgcca | aatggcagaa | aggtttctgg | ttttgcagtt | tgaaaaggat  | 240 |
| tatagagcgg | ggaacaaggt | aaatatctga | aggtctgcat | gatagtactt | cttttcctat  | 300 |
| tgctttggag | ttatttttta | tacctcttta | cacaatgtgt | gagactacca | aatttacatt  | 360 |
| gcactgttcc | aggtgacttg | tgcagttgac | aaactatgac | ccagcatagc | aacctaggca  | 420 |
| agaggagcct | atataattca | ttcttattcc | tattttgcta | tttcaacttg | tttctgtttt  | 480 |
| ataactgcaa | atggcctccc | aggggtagca | actgttggca | acttaaagtt | aagccagtag, | 540 |
| ttctcctcac | tccatatcta | tgctgcttgt | ctttgcatat | aaagtgagtg | gatgctgggg  | 600 |
| gcatggaaaa | acaaaactat | ttaagtgtgg | gagaagcctg | tgacttttgt | agtcctttgg  | 660 |
| ggaattttc  | acatgaccaa | gggccaaata | gttctganng | ctcctgtgcc | aatcctggga  | 720 |
| ataanagcaa | tggggatgtt | aagggagttg | aaaagggggg | ccaatgggat | ttaagt      | 778 |

<210> 56

<211> 770

<212> DNA

<213> Homo sapiens

| aatagtggtg | atgtcatgca | ggcaatgatg | gcggaagggg | aggacgtggg | atggtggcgg | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| agctggctgc | agcagagcta | ccaagcagtc | aaagagaagt | cctctgaagc | cttggagttt | 120 |
| atgaagcggg | acctgacgga | gtttacccag | gtggtgcagc | atgacacggc | ctgtaccatc | 180 |
| gcagccacgg | ccagcgtggt | caaggagaag | ctggctacgg | aaggctcctc | aggagcaaca | 240 |
| gagaagatga | agaaagggtt | atctgacttc | ctaggggtga | tctcagacac | ctttgcccct | 300 |
| tcgccagaca | aaaccatcga | ctgcgatgtc | atcaccctga | tgggcacacc | gtctggcaca | 360 |

getgageeet atgatggeae caaggetege etetatagee tgeagtegga eccageaace 420 taetgtaatg aaceagatgg geeeeggaa ttgettgaeg eetgeeaace agagetetgg 480 geacagatte tggtggetee etgetggeee tentgggeet etgeteaac etgggaaggg 540 getetetaaa teeeggneaa aaactetgae ttgtgeeaac aataggatga eccaagggag 600 aggaaaceta teeteeteae eagaagaace tgtgtttte tgetgaacae ecaetgttee 660 tgaggaetee tgetgggaaa teeeaaggga tagttetage eettetgeet gtgtnaacan 720 aagetaaace aceaagtete tetegggga aacetganae aacatactee 770

<210> 57

**<211> 756** 

<212> DNA

<213> Homo sapiens

#### <400> 57

gtaattaget gggctcagtg ggcacactcc tgtagtccca gctacttggg aggctgaggt gggaggatca cttgacccca ggagttggag gctgctgtga gctatgatga caccactgca ctccagcctg ggcaacagag tgagaccctt ggcatcatac tcagatcctt ccaactgcta 180 ggatgaagca tacagacaag tgcccactct ggatataggt gttggtgttc tctttctgtt tctatgggtc cagtctgtgt tcttttgtaa gatgtctggg caagccagac caaagtctcc 300 tatttttact tgctgatcag ggccatgaag aaaaatattt ctaggcttca gatctctgtt 360 tacaataccc atgttatgta tgtaaaacac accttccact aaatcttgaa aattttttgt 420 tgcaacactg gccataagga caggcaaact tgcccacaca ctcttggccc tgtttgtttc 480 tctcagctag ccagtcccac agctggagct tgcacacctg catctggatg tgcagcatca 540 ggtggtactg cacctcgatc cccaacaagt tgaagttttc tttggaagat tcctcagtgg 600 atgtgaaatt ctcctctaag agggaattac acctgagcaa caagggctgt ttcacaaatt 660 gaccaggtag acaaaccaag ccangccatt ttcctgggag ctccaaggga tgattcaaaa 720 756 ttcactgggg ggtccccctt aannaccggg aatttg

<210> 58

<211> 781

<212> DNA

<213> Homo sapiens

<400> 58

|   | cttgaaaagt | taacgtagaa | aatatccaaa  | aagcagtatt | tctagaaagt | gtccaaaaag | .60 |
|---|------------|------------|-------------|------------|------------|------------|-----|
|   | cagtatttct | ttcccttggt | tgtgagagta  | actaattata | taaatattac | ctcaaaaata | 120 |
|   | catacactgg | tatcacacag | tctttctaca  | atgtttctgt | attctgaaag | ctaaatatta | 180 |
|   | agtactattt | ttccattcaa | atattcattt  | agaatttcct | ttagaagatg | gcagtgatta | 240 |
|   | taatattaat | atgatttcat | ttgttccagt  | gtttagacat | gaaatcatct | tccttgtctc | 300 |
| _ | atgaaaacct | aaatataaaa | aaaaggaaaa  | tactggagtt | tttatttctc | ttgtctttgt | 360 |
|   | tacatcctct | gtttattata | attttagcac  | caacttcaca | cctagctaat | tttttttcat | 420 |
|   | cataaagtgg | atgaaatgag | caagtaccta. | aaaattttat | ttcagacaaa | agtcaggagt | 480 |
|   | tactgctaaa | aaacagacat | gtaggagaca  | ttcaacagga | gtatgaaatg | agagttagac | 540 |
|   | catatgggct | gacaacacca | taaataacaa  | gaaaagggag | tgctgaaata | ggagagaaca | 600 |
|   | gagcaaatgt | tagctcaaag | tatagactta  | gaaatatcaa | agtaagagct | atctggataa | 660 |
|   | atatataaga | tattgagtgc | ttgggaatcc  | tagcctacta | aggtgaaaaa | ttaagtccca | 720 |
|   | aatgtcagga | ataacttaca | ggaaaaatnn  | naaaatgcac | aagctttaaa | aatgggggca | 780 |
|   | a .        |            |             |            |            |            | 781 |
|   |            |            |             |            |            |            |     |

<210> 59

<211> 643

<212> DNA

<213> Homo sapiens

<400> 59

ctttttgtga gatttgtgtt cttaagtctc atctctctga tcataagcca tgttccttca 60 caaaattccc aaatacatta aaagtgtaaa atgtgttaaa agcagacact taacataaag 120 taattcatac tcttctggca ttgcttaagt ccagtagtcc ccccgtcatg tggttttgct 180

ttcctggtt tcagttaccc acaaccaact acagtcaaaa aataggtgag tacaggacaa 240
taagatactt agagagagac cacatcacat aactttcata gtatatttt agatttactc 300
tattttgttg ggaatctcat gttcctaatt tataaattag gtgnctaatt tataaattaa 360
actttagcac aacagataag tatgtatagg aaaaaaacat agtatgtata gggttctgta 420
ttatccaaat gcccatttca gccattcact ggggggtttt ggaacgtatc tcctgcaggt 480
aaagggagac tactgttctt agagacaaaa gatgataaga aatggttta ggttgtattt 540
gtggcctcta ttgaagccca aggaaatcat aaaggatttc aacttgaata ccnccaaaat 600
gtcagggtta aatcnccata agtgcacata aaaaaatgtc naa 643

<210> 60

**<211> 576** 

<212> DNA

<213> Homo sapiens

#### <400> 60

gataacataa tcaaagagga aaaaccaagc attggtgaat tcatcccttc ctttcaactt 60 ggcctctctc acccacttta cttttagtgc agagttcagt gatggctagc agctgtcccc 120 tgatatttgt tattccaagt atccattcat aggtctgggg agaggttgtg gcaagctttc cctaaataaa tcacaccctt atcttctaag cttgagcagt ggagggagac ttttcattcg 240 aggtgggtgg ctgaacatca tcattcctgt tctggacttc ttgtaatcat gttggattca 300 gagggcacca ctctctttg tacagatctg acctaacata gacatagact atagcagaga 360 420 tgaatccagg ctataacatt taacaagacc ttattaaaag cttcaagatg ttagccttta 480 tetgtteeat atetagetta ettggttgtt tttgggggat cacatgtetg teetecaaac tggaaacgtc taactctcca ggagatgcag tagcattatt tgttggacag tggcacctac 540 tggnantttg taangtttat agcccaatgt gaaagg 576

<210> 61

**<211> 462** 

<212> DNA

### <213> Homo sapiens

## <400> 61

| cccgcctccc | gcctcccgcc | tccctccagc | tgcgagtgcg | gcctcggctg | gcggcggcac | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| caggccacag | ttgtaaggga | tcttgtggct | gtcaggatgg | cagaggagca | ggagttcacc | 120 |
| cagctctgca | agttgcctgc | acagccctca | cacccacact | gcgtgaacaa | cacctaccgc | 180 |
| agcgcacagc | actcccaggc | tctgctccga | gggctgctgg | ctctccggga | cagcggaatc | 240 |
| ctcttcgatg | ttgtgctggt | ggtggagggc | agacacatcg | aggcccatcg | catcctgctg | 300 |
| gctgcgtcct | gcgattactt | cagaggaatg | tttgctgggg | gattgaagga | gatggaacag | 360 |
| gaataggtcc | tgatccacgg | tgtgtcctac | aatgctatgt | gccaaatcct | acatttcata | 420 |
| tacacctccg | agctggagct | cancetgage | aatgtacang | na         |            | 462 |

<210> 62

⟨211⟩ 824 ′

<212> DNA

<213> Homo sapiens

## <400> 62

tgggtgccca ccgaccggcc tcgagcgccc cggcgggagg tttttctata tgagtggaga 60 agacagctgt taccagggag gtcatacaac attttttag gatgtctgaa gatgaagaaa 120 aagtgaaatt acgccgtctt gaaccagcta tccagaaatt cattaagata gtaatcccaa 180 cagacctgga aaggttaaga aagcaccaga taaatattga gaagtatcaa aggtgcagaa 240 tctgggacaa gttgcatgaa gagcatatca atgcaggacg tacagttcag caactccgat 300 ccaatatccg agaaattgag aaactttgtt tgaaagtccg aaaggatgac ctagtacttc 360 420 tgaagagaat gatagatcct gttaaagaag aagcatcagc agcaacagca gaatttctcc aactccattt ggaatctgta gaagaactta agaagcaatt taatgatgaa gaaactttgc 480 tacagectee tttgaccaga tecatgactg ttggtggage attteatact actgaagetg 540 aagctagttc tcagagtttg actcagatat atgccttacc tgaaattcct caagatcaaa 600 atgctgcaga atcgtgggaa accttagaag cggacttaat tgaacttagc caactggtca 660

ctgacttctc tetectagtg aatteteage aggagaagat tgacageatt tgeagaceat 720 gteaacaagt getgetgtga atgtttgaag agggaancaa annettaagg gaaaggetge 780 aaaaatacaa geetgggaag eteegeetg tggeaaggtg cace 824

₹210> 63

⟨211⟩ 730

<212> DNA

<213> Homo sapiens

#### <400> 63

agtotgggto tggagootga goodtgcgga acctoggcgo ccggccccac cccgcccgta cctgcactta tttattgttg ttatttctta ccgcggagcc ccgcagtcgg gtcctcccgc 120 ecgeteeege geagegetag catteteeag teceteagte cetteeegeg eggtgegeeg 180 cagccgaggc gatgcgccac attcagaaca tgtgcaccat cgccgagtac cccgcgccgg 240 300 gcaacgccgc ggcctccgac tgctgtgtgg gcgccgccgg ccgccgcctg gtcaagatcg ccgtggtggg cgccagcggc gtgggcaaga ccgcactgtt ggtccggttc ctcaccaaac gattcatcgg tgactatgaa agaaatgcag gtaatctcta tactagacaa gtccagatag 420 aaggtgaaac cctggctctt caggttcaag acactccagg tattcaggtc catgagaaca 480 gcctgagctg cagtgaacag ctgaatangt gcattcgctg ggcagatgct gtggtgatcg 540 ttttctccat cactgactac aagagctatg aactcatcag ccagctccac caagcacgtg 600 cagcagctac acctgggcaa ccggctgcct gtggtggtcg tgggcaacaa aagctgacct 660 gttgcacatc aaacaagttg accetcaact tggactgcaa ctaaccanca tgctangetg 720 ctcaattcna 730

<210> 64

<211> 746

<212> DNA

<213> Homo sapiens

### <400> 64

| aattataatg | gatttgaaat | ttgccctaac | caagagtcac | agacagaaaa | aaggaagtta | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| atgtatctct | tgatcactgt | caagatgtgg | tattgaacct | tcaagatcct | tttcagggaa | 120 |
| tatgtgagat | caaaattttt | atactggcac | tatgatgtta | tttgcctttt | cctcatattc | 180 |
| acaagtgaac | agtggagttt | tacagaagct | atataatgtc | atgacatcac | tgatgggtaa | 240 |
| tagaatgtgt | gcttgtatat | tccgaaactt | tcagttccaa | tttcttcgat | caatgtaatc | 300 |
| ctcataagta | aaagttattt | gaggacctca | gacattttta | aaaatgtaaa | gggggtgggg | 360 |
| tcaggctcag | tggctcatgc | ctgtaatccc | agcattttgg | aaggccgagg | cgaacggatc | 420 |
| acttgaggcc | aggagtttga | aactagtctg | gtcaacatgg | tgaaaccccg | tctccactaa | 480 |
| aacaaaaagt | tttctggatg | tggtggcaca | catacctgta | atcccagcta | ctttggtggc | 540 |
| tgaggcatga | gaatcacttg | aacccagaag | acaggttgca | gtgagccaag | attgtgcccc | 600 |
| tgcattctag | cctgggtgac | agtgagactg | tctcaaaaaa | taaaggtgta | cagggantgt | 660 |
| atatttgaca | acttggtatg | tanggatgtg | ctacctcnaa | agttccatgc | tgttacctaa | 720 |
| gttttcactc | actactatat | tttggg     |            | •          |            | 746 |

**<210> 65** 

<211> 836

<212> DNA

<213> Homo sapiens

## <400> 65

agaaacctga attcagactg attaaagaag gtgaaacaat aactgaagtg atccatggag 60 gtgcgttcct tatgttacct ggggccgact accttcgctg tgattatttt gaaatagtgt 120 tggtttagaa atattgaaca tctgatattt tctcttagtt cttattttat aaaaattgtg 180 ggaattattt cctcagctat gagttcttat tagctggtca gaaataaaac atagttagct 240 tttaatggat ctagttggaa ttaatttatc tattaagtca ctgggcccaa caaaatgtca 300 tgatttttgc atatacaagt gaggattgtg gaataaaatt gtaacattaa tgtcagtata 360 420 aaaggaaata ttagaaacag taggaaaaaa tgaccattgt ataagtctct gtctaataag ccactccact actaggattt atgatagggc tcccattcca atgatataga actccctggg 480

atteteacta agtatttatt ecacatecag aaaacaagta tggcatggag agttaggatg 540 teaaatggee eteteteta accaagatte aggacatage tattacettt tagateeta 600 ttgatatgat ttttggggga tatgttetaa aaatgtttat gattgaatet taaatggtaa 660 tatttgtaga aatatagtta ateattacaa tgtenagett atgggatgta tagteacaat 720 atgagggtaa aateaaatge atttgtante eeetgetttt anaggeeaat ttatttaaaa 780 aaatacacca aaaateaatt ggatnggagt geeetgtggg aaataacttg aaaaaa 836

<210> 66

**<211>** 724

<212> DNA

<213> Homo sapiens

#### <400> 66

cttgaaaaaa gcgaattcaa agatgaaccc ctacttttcc gttttttttc ggatgaggaa atggagggat caaatatgaa acatcgactt atgaaacatg acttaaaagt tgtggaaaat 120 gttatageta agteattatt gattaaatee aatgaaggea getatggett tgggetagaa gacaaaaata aagttccaat aataaagttg gtagaaaagg gatctaatgc tgagatggct 240 ggcatggaag tcgggaaaaa gatttttgct attaatggtg acctagtttt tatgagacct 300 ttcaatgaag tggattgctt cctgaaatcg tgtttaaaca gcagaaaacc tctaagagtt 360 cttgtgagca caaagccaag agagacagtg aaaattccag attcagctga tggacttggc ttccagatcc ggggatttgg cccttctgtt gtgcatgctg tangaagagg aactgtggct 480 gcagcagctg gtcttcaccc tggacagtgc attatcaagg tgaatggatc aatgtcagca aagagacaca tgccagtgtc attgcacacg ttacagcctg cangaagtac aggcggccaa 600 cgaagcaaag attccataca atgggtttat aatagcattg agaagtgctc aagaagacct 660 720 tcaaaaaatc tcantccaag cccctggag atgaagcang ggatgcnttt gacctgtaaa 724 agta

<210> 67

<211> 713

<212> DNA

<213> Homo sapiens

<400> 67

atgacaggtt cotgggccgc gccgcctcgc cotgcctggg cggggttggg acctttctgg caccigegic gaageeggeg geaggatgga cittgitgic ceggiceeag accaecetee tecacegteg ceteceactg caaaaaggee tggataagga acctaatteg agetaceett 180 ctctgtgaag ctcgacggct gagaacgtca gggcttgttc ccaagtctct ttccagaggc caggetttat gggageatgg gttaccageg acgeaecetg atcaageaga gaaagagagg 300 ctggagaagg aagagtgaca gaagtaagaa gagagtgtot otccacttoc actocagece 360 cctacagete atectecage aggeagecaa gggeaetttt aggateteae ateaggteet 420 tgcctcacat tetgcaetgg etteccaagt aattaaagta aaatecaaat tecageteae 480 agettanaaa acteageagg actggeetet gteefateee acaccecaae teagteeete 540 aageteatet eetgteatte etgeeeattt etggaeeeea geeacteete aaacanggtg aggatcagtg tecaaggeae aatettgaae teateatege caaatatgtg ageaettgat 660 gttggnette caacetecan accetaagge agtacattte ettgtaaaat tan 713

⟨210⟩ 68

**<211> 860** 

<212> DNA

<213> Homo sapiens

<400> 68

aaaaaactag caccggcccc gcatgcactc agcctgccaa gaccacagcc ttgtaaggat 60 aagttactta atttagtttc acttggtcat aaagcatgag acagcctcat ttactggctt 120 ctgcttttaa tgctttatca aggataagga ggaacttcta atcattttt ttgaaacttt 180 tatatgtgtt aagttttcag ggcaatagac aaagacagat aatctacagg gtaacttccc 240 aacaagatag ttctgtcttg caagtcatca gtgggcctga aacatctgta caagaagaga 300 tatctgtgga tgctatgcat gtcttcattg atgaacatgg ggaaattaga tcctgttatt 360

taaaatctgg aaatcagaaa gaaggccctt tacagcctct accatcaaat aatgactgtc tototoaggo togagagatg caggtoagot cotocagtac cacaacttot gagagtoaag 480 atccgtcttc tggggaccct gccgtcagtg cccttcagca acagctgtta ctgatggtgg 540 ctcgcaggac ccagtcggaa accccacggc atgtgagtca ggatctggaa gcctcgtcat 600 gttcttcaac acaaggaaaa tttaaccgag agcagtttta caaatttatc attttccctg 660 gcaagtggat taaagtctgg tatgatcgac tgaccttgct gggcattacn tgatcgaact 720 gaagacatca agggagaatg tactggcgat tttactcaat ggcctggttt ccctccttgg 780 atttctgacc ttgagccaan ggttttgcaa agatatgtgg gtgctcccct tcngcctccg 840 860 tcaagggcaa gtggcantaa

<210> 69

<211> 806

<212> DNA

<213> Homo sapiens

#### <400> 69

aataatttat agcettteee ttaaateaag ategagttta aaattatagt ttgtettttg tettaacagt tetgaatget gteeteaaag tatataatgt tteatgtace aagaceettt 120 tcacagtaca ataaacagat ctattcataa atttttgtta ttttataaat aaatgattac 180 ataattttag ttatatggca atggatttct tttagttggg ttataaattt ctattataaa 240 tttaaattac tgagttgtga atatatgcag ctttattaag agaatttaca aattcaatga 300 tataaaataa ggtaggcctt gattcacttg gttgtttttt acttatttaa tattccaaca 360 ttgctatctc taaaaatgca ttatcatgtt ttgaagggat ttgctcttga atttagctcc 420 agggagaaag tatcaaaata acttttttt tttttttga gatggagtct ggctctgtca 480 cccaggctgg agtgcagtgg cgtgatcttg gctcactgca agctccacct cccgggttta 540 600 caccattete etgecteage etcecaagta getgggacta eaggtgeeeg ceaceaegee 660 tggctaattt tttgtatttt tagtagagac gggctttcac catgttggcc angatggtct cgatctcctg acctcgtgat ccgcccgcct cagcctcccg gagtgttggg gattacaggc 720 780 atgagccanc gcaaccgggc caaaataact tgagaaaaca gatngctctg cagtttaaag

#### gaagtataag tnccccgaac ctgaat

806

<210> 70

₹211> 839

<212> DNA

<213> Homo sapiens

#### <400> 70

aaaaaaaaat agatgctgcg tccaagcgtt accgtggctg taccttggcc tctgcagcct cctggtggg gaggcagagg ccccgagccc cgtggatccg ctggagcgga gccggccgta cgcggtgctg cgagggcaga acctggagtc cctgtcgccc aggctggagt gcaatggtgc 180 gatctcggct cgctgcaacc tccgcgtctg gggttcaagc gattctcctg cctcagcccc 240 ctgagtagct gggattacag tgttgatggg aaccattttc ggcatcctgc tggtgactgt 300 catecttate geattitete tetacaagee catteggeet eggtgacage cagacaagtt cttcaatgag tatttgggaa taggataagt tgtgttgcac acaggccagt ggagaagttg gaaccaaaac tttcctactt ggaaatgacc tttggtctgg acagttggta aatgctaaat 480 gaagtagaag aaaacatgta ctagacatta ttttttccta acactgtagc gcaaataatt 540 ggcccctgag tccgcttctc agtgtttctg actgtacttg ttaaaagtaa gacctgaaag ctccaaaggt cagtgtaaag atggagtgtt catgagaaag aaaacatggt aaccttgtga 660 gtgcctgtaa gaaccacact gtaaagaact catcattaat gcttgaaaaa tgttattaaa 720 gaaaggagac ttaccaagca ggacattccc taattaaaga aaccaatttg ggtacagtgg · 780 ggttaanaat cacaagattt tttttttaa acccaacctg aagtttancc taaaaatnc 839

<210> 71

<211> 793

<212> DNA

<213> Homo sapiens

<400> 71

| agaaattttt | tctgtgttgg | acctaatgaa | agtggacatg | gccaactttg | ctatcagtag | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| catcaggcct | catctcatgc | agcagtcagt | tgaatacgaa | aggaagaagt | ttcaagagat | 120 |
| tttggagagg | caaccaaatt | ccctggactt | tgtcacccag | tggctggaag | aagcctcaga | 180 |
| ggaccttatg | actcagaagt | ataaacacgc | cctgccagtg | gggggaatgg | ctgctggctc | 240 |
| tggggacatg | cccaggctga | gccctgttgc | tgtccagaat | tacgcttacc | tgaagcttct | 300 |
| gaagtgggac | cacctccaga | ggccgttccc | cgaaacagtt | ttaatggacc | agtctcgctt | 360 |
| ccacgagete | cagttgcagc | tggaacaact | gaccatcctg | ggggctgtgt | tgctggtcac | 420 |
| cttcagcatg | gcagcgccag | gaatttccag | ccaggccgac | tttgctgaga | aactcaagat | 480 |
| gattgtgaag | attttgctaa | cagatatgca | cctgccctcc | ttccatctga | aggacgtcct | 540 |
| cactaccatc | ggggagaagg | tgtgcctgga | ggtgagcagc | tgcctctccc | tgtgtgggtc | 600 |
| ctctcccttc | aacacggaca | aggagaccgt | gctcaanggc | cagattcagg | ccgtggccag | 660 |
| tcccgatgac | cccattcgca | ngatcatgga | atctcgaatc | ctgaccttct | tagaaaccta | 720 |
| acttgcctcc | gggtcatctg | aaagccaatt | gcccacagtc | cctggggggg | actcagtcca | 780 |
| gtttaanana | naa        |            | •          |            |            | 793 |

<210> 72

<211> 724

<212> DNA

<213≻ Homo sapiens

## <400> 72

| gcggtgcctg atggggcc | gt tgggcggccg | gtagctgttg | ctgttggggg | acccctcat  | 60           |
|---------------------|---------------|------------|------------|------------|--------------|
| tcctgccgct gccgtccc | tg ctgcctcatg | gcggccatcg | gagttcacct | gggctgcacc | 120          |
| tcagcctgtg tggccgtc | tá taaggatggc | cgggctggtg | tggttgcaaa | tgatgccggt | 180          |
| gaccgagtta ctccagct | gt tgttgcttac | tcagaaaatg | aagagattgt | tggattggca | 240          |
| gcaaaacaaa gtagaata | ag aaatatttca | aatacagtaa | tgaaagtaaa | gcagatcctg | 300          |
| ggcagaagcc agaaatgc | gg tccttggacc | tggcttctca | gcttctccga | aatcagatag | 360          |
| tgactgaccc agacaact | ta atggaggatg | ctgcttgggc | caagcactgt | gatcagaact | 4 <b>2</b> 0 |
| tagtggcctc tgacgccc | ca ggggaagagg | gaaccggcat | tctaaaatca | aaaaggactc | 480          |

| aggcagctga | tcatcagcct | atcttgaaaa | cagttaaggc | atcagatgag | gattgtcagc | 540 |
|------------|------------|------------|------------|------------|------------|-----|
| taaagaatca | gtgaccggat | acgagaaacc | agtgaccttg | aggactcctg | ggatgaatcc | 600 |
| tcgggtgcag | ggtgctctca | agggacccca | gctacagcaa | gctcccacaa | gccttttcag | 660 |
| angtgcaatt | gctccctgtc | agagcagccc | atnggcaaac | tggggtgtnt | cccggggaag | 720 |
| ccaa       |            |            |            |            |            | 724 |

⟨210⟩ 73

′<211>′ 736

<212> DNA

<213≻ Homo sapiens

## <400> 73

| aagagatgac | aaggtaacat | ggacgtttag | gctccaggaa | actttaagac | aaattaacgt | 60          |
|------------|------------|------------|------------|------------|------------|-------------|
| aaaaatggtt | tctgggctgg | taataccctt | ggtgtttctg | ttaaaaacat | gaagaacggc | 120         |
| tgggcgtggt | ggctcacgtc | tgtaatccca | gcactttggg | aggccgaggc | gggtggatca | 180         |
| cctaaggtcg | agagttcgag | accagcttga | ccaacctgga | gaaaccccat | ctctacttaa | 240         |
| aaaattaagg | catcctacat | gcctgtaatc | ccagctactc | agaaggctga | ggcaggagaa | 300         |
| tegettgaac | ctgggaggcg | gaggttgtgg | tgagccgaga | ttgcgccatt | gcactccagc | <b>36</b> 0 |
| ctggggaaca | agagaaactc | tatctcaaaa | aaaaaaaaaa | aaaaaaaacc | tgaaaaacat | 420         |
| tttctggagg | aaatttcatg | gtttagatca | caaggaattt | cagataaagc | aagccttgca | 480         |
| aaagatatgt | tcatagtaaa | ttgcagagct | ttaggaaaca | tttcactgaa | atgagagtca | 540         |
| atgacaaata | ggattagagc | ctctaacagg | ttatctgaga | gaatatttt  | acgtttaaaa | 600         |
| ttgttaaaat | aaacctaaag | gaaggaatca | accctaaaga | tcaaggttgg | ccgggtgcgg | 660         |
| tgggctcaag | cctgtaatcc | caaccctttt | gggatcctga | accaggtggn | tcacctgagg | 720         |
| ncanaagttc | gagaca     |            |            |            | •          | 736         |

<210> 7.4

<211> 651

<212> DNA

#### <213> Homo sapiens

## <400> 74

cctacaattt ttagtttacc acttatetet tacagaagca agtgatttee tacccetaga 60 tttttagtaa caccttaaaa atgtattgaa aacaaaaatt aagttacatg tcataatctc 120 agaagtagac atacagatat acctgtcaac attttttctc attataaacc aatttcagct 180 240 tttaatgttt cttctccc caaaaagcag caatagtagt agatttaaca ataccataga 300 ctcatgacta tgaaatcgtg gctatttgtg ttaacatgtt gttcctgttg ttgatgtgat 360 acaaagetee tgeaaaacag etggeacagt ecagtgeact ggetteeete actggacteg 420 gtaagtgttt tccatatttg tgagagggcc taaagggaaa aatcacacat acattgtctc 480 tetgegtgtt etattttgaa aetgtattag teetaeteag tittataaaaa eetaggtett 540 agggttatgt catcetgtet aaaaaggttt geetattttt ttgactaaeg eatteaeagt 600 gagaaattta taaatgtgat gggtaattca tagnttaatg ggggcangnt a 651

<210> 75

**<211>** 691

<212> DNA

<213> Homo sapiens

#### <400> 75

gagtotgoga acggagoago tgotgoagoa gggoocatgg oggacacoca gtacatootg - 60 cccaatgaca teggegtgte tageetggae tgeegtgagg cetteegeet getgteacee 120 acagagegee tetatgeeta ceacetgtee egtgeegeet ggtaeggagg cetggetgtg 180 ctgcttcaga cctcccctga ggccccctac atctatgctc tgctcagccg cctcttccgc 240 gcccaggacc ccgaccagct gcgccaacat gccctggctg aaggccttac cgaggaggag 300 360 tatcaggogt tootggtota tgccgcgggt gtttactcca acatgggcaa ctacaagtcc tttggtgaca ccaagtttgt tcccaacttg cccaaggaaa agctggaacg ggtgatccta 420 gggagtgagg ctgctcagca gcacccagaa gaagtcaggg gcctctggca gacctgcggg 480

| gagcttatgt | tetetetgga | gccaaggctt | cgacacctcg | gactggggaa | ngagggaatc | 540 |
|------------|------------|------------|------------|------------|------------|-----|
| accacctatt | tctctgggaa | ttgtaccatg | gaagatgccc | gggtccgcct | cgaccgcatc | 600 |
| aagatccggt | ctgtgggcaa | agcctgctct | aaangcgctt | cctgcggana | cttcaaggtg | 660 |
| ctgaaagtcc | aacangggaa | tttggccggg | а          |            |            | 69  |

<210> 76

**<211> 781** 

<212> DNA

<213> Homo sapiens

## <40.0> 76

| atcttcaaca | aactttacaa | aaacaagcaa | tggggaaagg | aatccctatt | ttaacaaatt | . 60 |
|------------|------------|------------|------------|------------|------------|------|
| gtgctgggag | aactagctag | ccatatgcag | aaaattgaaa | ctggaccctt | tccttatacc | 120  |
| ttatacaaaa | attaactcaa | gatggagtaa | agacttaaat | gtaaaatcca | aaactataaa | 180  |
| atccctagaa | gaaaatctag | gcaataccac | tcaggacaca | ggcatgggca | aagattgtat | 240  |
| gatgaaatcg | ccaaaaggaa | ttgcaacaaa | agcaaaaatt | gacaaatggg | atctaattaa | 300  |
| actaaagacc | ttctgcatag | caaaataaac | tgtcatcaga | gtgaacagac | agtctacaga | 360  |
| atggaagaaa | atttttgcaa | tctatccatc | tgacaaaggt | ctaacatcca | gaatctacaa | 420  |
| ggaacttaag | caaatttaca | agaaaaaaag | aaccccatta | aaaagtgggc | aaaggacata | 480  |
| aacagacatt | tctcaaaaga | agacatacac | atggccaaca | aacaagaaaa | aaaggtcaac | 540  |
| atcactaatc | attagagaaa | tgcaaatcaa | aaccataatg | agataccatc | tcatgccagt | 600  |
| cagaatggtg | attattaaaa | agtcgagaaa | caacagatgc | tggcaagggt | tcagagaaac | 660  |
| acttttacac | tgttggtggg | aatgtaaatt | agttcaacca | attgtgggaa | gacangggtg | 720  |
| gtgantcctc | aaaggattta | ggaactggga | aatatcattt | gacccagcaa | tcccantact | 780  |
| a          |            | -          |            | ÷.         | •          | 781  |

<210> 77

<211> 838

<212> DNA

### <213> Homo sapiens

#### <400> 77

cagaaaagca aaaaccaaga ggtcaagaaa agcagtccag agatggagga tgctcgcgtg ctttcaaaaa agcagcctga cgtgtcctct agagaggtca ttctgctgag ggaaggagag gctgaaagaa agcctgtgag gaaagaaatt cttaaaagag aatctaaaaa aatcaaactg 180 gacagactta atactgttgc cagccccaaa gactgtcagg agcttgccag tatttctgtt 240 gggtctggct caaggcccag ctcagaccta caagcaagac tgggagaacc agcaggtgaa 300 tetgtggaaa ateaagaagt eeaateaaaa aageeeatte eeteaaaace acageteaaa 360 420 cagctgcagg tattagatga tcaaggacca gagagagaag acgttaggaa aaactattgc 480 agtettegtg atgaaacace tgaaegtaaa teaggeeaag agaaateaca tteagtaaat 540 actgaagaaa aaattggcat tgacatcgat cacacgcaga gttaccgaaa acaaatggaa 600 cagagtegta ggaaacagca gatggaaatg gaaatageca agtetgagaa gtttggeagt cctaaaaaaa atgtagatga atatgaaaga cgtagcctcg ttcacgaggt angcaaaccc 660 720 cctcaagatg tcactgatga ctctcctcct agcaaaaaga aaaggatgga tcatgtcnat tttgatatct gcaccaagcg agaacgggat tacagaagtt cacgccaaat cagcgaagat 780 totgaaaaga otgggtgggt tonocantgt oogacatggg tooctocant gaagatta 838

<210> 78

<211> 800

<212> DNA

<213> Homo sapiens

### <400> 78

gtgttactga tgtcaacctt aaataacaat atccangata atattgttac cagcggtgag 60 tccagctatc tggagaaact ccagaatggc aactttgtgg caatttcagt tctttgtctt 120 ctggaaggaa agatttcaaa tgagagacac aggcaaggtt taaagcagga gggagaattt 180 attttaagca aagcgagaat ttattagaga gagtacactt gaaggagagc catgtgggtg 240 acttgaaaaa tcaagtgtgt tgtttgcttc agtcacgccc cccacagcca tgcctgggca 300

gttgtttaaa ggtattttgt tcctaactgc ctcccccatt atcttcatgt acctggaatt tgtgatacaa tgaacaataa tatagccaat ccatagctta tgttatttta atgtaaattc 420 tttgtaaaca acttaggaac agcctcttcc tttatcttta aaatcccact tgtaactgct 480 actaattgaa gtgtatattc agggcacttg aatctatgct cccactgagc tgttcttaag 540 ttttgggctc aggtgaactc taaacttagt catagaatan ggtgttagac atgagcaggg 600 660 caagagagag ggcccccaag aatgttgggc agttgtcaag ccatggtcag gcaattataa 720 atctgtcccc ctgaaataat gagcaagaga agggaggaac cccaganctg tctgggtcca ataaagtaac ngncaagcag gcataaaacc gtccttcaa agataataag ttgggcatga 780 800 ctgggtgcct ggaaatgaca

<210> 79

**<211> 808** 

<212> DNA

<213> Homo sapiens

#### <400> 79

tattgtacaa attcgccaat attcaacagc gttcttaaac tgaacaagca tatcaaagag aatcataaaa acattccctt ggccctgaat tatatccaca atgggcagaa atccagggcc 120 ttaagccccc tatctcctgt ggccatagag cagacatctc ttaagatgat gcaggcagta 180 ggaggtgcgc ctgcacgtcc cactggagaa tatatctgta atcaatgtgg tgctaagtac 240 acatecetag acagettica gacteaceta aaaacteate tegacacigi gettecaaaa 300 ttgacctgtc ctcagtgcaa caaggaattc cccaaccaag aatccttgct gaagcatgtt 360 accattcact ttatgatcac ttcaacgtat tacatctgtg agagttgtga caagcaattc 420 acateagtgg atgacettea gaaacacetg etggacatge acacetttgt ettetttege 480 tgcaccctct gccaggaagt ttttgactca aaagtctcca ttcagctcca cttggctgtg 540 600 aagcacagta acgaaaagaa agtctatagg tgcacatctt gcaactggga cttccgcaac 660 gaaactgact tgcagctcca tgtgaaacac aaccacctgg aaaaccaagg gaaagtgcat aagtgcattt totgogggtg agtootttgg canogangtg gagotgcaat gocacatoan 720 780 cactcacagt aagaagtaca actgcaagtt ctggtagcaa aaggccttcc aatggcgatt

|   | uutttagett | agnadadaca | ccttgliga                             |            |            |  | 000  |
|---|------------|------------|---------------------------------------|------------|------------|--|------|
|   |            | •          |                                       |            |            |  |      |
|   | <210> 80   |            |                                       |            |            |  |      |
|   | <211> 741  |            | •                                     | ·          |            |  |      |
|   | <212> DNA  |            |                                       |            | •          |  |      |
|   | <213> Homo | sapiens    |                                       |            |            |  |      |
|   |            |            |                                       | ·          |            | **************************************   |      |
|   | <400> 80   |            | · · · · · · · · · · · · · · · · · · · |            |            | e de la companya de l | •    |
|   | tttttaaata | cagatttta  | tttaaccctc                            | ttgcatatac | atataaaata | acaaaaaaat   | 60   |
|   | aaaatattga | gatatcatca | agaaatttct                            | acagcttcac | attcaaactc | ttcagcactt   | 120  |
|   | tcagagctat | tgatatgcat | atgtccacct                            | agtaccatct | tctgtgcttt | cagaattatt   | 180  |
|   | ggtaaggctg | catttcctga | gtgctctacc                            | acacttatgt | ctggattttt | tttacccagc   | 240  |
|   | tacagaccca | cactcctgca | agatttgata                            | cccttctatt | tggcaaaact | cagtttcact   | 300  |
|   | tttctttcag | tttaatcaca | ggtccttaga                            | agatcggacc | tgtgattcta | ttcaaagtca   | 360  |
|   | gaaagagatt | tctcacaaat | tgatgtcata                            | ttaacatgtc | aatatgaaaa | ttattgtttg   | 420  |
|   | gtaaaccaga | agtgacctgt | ctgaagccct                            | caattgtggt | atttgtgtgt | ttgttttttc   | 480  |
| - | tttttcaaga | ttctttttaa | agaaaatata                            | tggtagctgt | tgtttaacat | ttatctactt   | 540  |
|   | acagagcgtt | cagaggatgt | tatatgttta                            | ttaagtgctc | aatactgtat | tttaacctaa   | 600  |
|   | tctgaatttt | aatcataatc | ctgcacaatg                            | catggattct | ggntgctttg | aaatggttct   | 660  |
|   | gttcaaagga | cttatcaatg | tctcntgctt                            | tgagatgtat | tgcntgggtg | tgtagtagca   | 720. |
| ٠ | caaacgtacc | accaataatg | t                                     |            |            |  | 741  |
| • | •          | •          |                                       |            |            |  | ,    |
|   | <210> 81   |            |                                       |            |            |  | • .  |
|   | <211> 889  |            |                                       |            |            |  | . +1 |
|   | <212> DNA  |            |                                       |            |            |  |      |

<400> 81

<213> Homo sapiens

aaattttagg agattetttg aataaacete atttagtete teteetataa aaggaaaage 60



agaacctcaa gtccacattt attttgcatt tgctctcttg ttcacattct tctctatgtc 120 aataaaagtt agatggcatt ttttatagct gtgtatcaaa tatgtgaata tagaattcca 180 actaaaatag caatagatgg gaaaactttc tagttcattc attgtcaaaa gtgagtgctg 240 agaggacato tgaagcccca cotaaaagta aatootcago aggaaagata atgcagataa 300 attttgggtc caaattctta atctgggcaa agaaagaaaa caaacacact tactagatgg 360 attiticata aaagiteett teeaigeigi eeaaagigat taaattagie ateeatiett 420 480 ttatctcttc tgttgataat catataagca actcctgaat ctatatgagt attcagtctt ctttattatt cagaagattt gccattttag tcaactcaaa tatcagtact atttcatagc 540 atgetagtte aggitacaca aageeeacea ggiacacetg gaatetagee agaatgeagt 600 ccaatcatga gcactttaaa catttacctc attttactat ttgtcttaga gctatggnaa 660 720 cattantctg ttctggagta tctcacactt cangagcatt agttgaagca gtacagatac agttaagtgt cctctccgga cattcatttg ttaactttgg aaacaactng gattcaaaga 780 cccttaaggt taaaaacaaa ccttaatggc ctattttatg ggaagaaaaa acctggttaa 840 889 ttttaatccn gggtttaaaa agttaaaaan cggttggcct ccnaccaac

<210> 82

<211> 810

<212> DNA

<213> Homo sapiens

#### <400> 82

agaaacatcg agaaaaagaa gctcaaactg gaggattata aggatcgcct gaaaagtgga 60 gagcatctta atccagacca gttggaagct gtagagaaat atgaagaagt gctacataat 120 ttggaatttg ccaaggagct tcaaaaaacc ttttctgggt tgagcctaga tctactaaaa 180 gcgcaaaaga aggcccagag aagggagcac atgctaaaac ttgaggctga gaagaaaaag 240 cttcgaacta tacttcaagt tcagtatgta ttgcagaact tgacacagga gcacgtacaa 300 aaagacttca gagggggttt gaatggtgca gtgtatttgc cttcaaaaga acttgactac 360 ctcattaagt tttcaaaact gacctgccct gaaagaaatg aaagtctgag acaaacactt 420 gaaggatcta ctgtctaaat tgctgaactc aggctatttt gaaagtatcc cagttccaa 480



aaatgccaag gaaaaggaag taccactgga ggaagaaatg ctaatacaat cagagaaaaa 540 aacacaatta tcgaagactg aatctgtcaa agagtcagag tctctaatgg aatttgcca 600 gccagagata caaccacaag agtttcttaa cagacgctat atgacagaag tagattattc 660 aaacaaacaa ggcgaagagc aaccttggga agcagttatg ctagaaaacc aaatctccca 720 aaacgttggg atatgcttac tgaancagat ngtcaagaag aagaaacagg agtccnttaa 780 gtccctggga ggcttctggt aagcacaaga

<210> 83

<211> 789

<212> DNA

<213> Homo sapiens

### <400> 83

| tagaggggaa   | gtcctatact | gtgtgcttca | tagtggtatt | tctaatgata | acttttgtgg | 60  |
|--------------|------------|------------|------------|------------|------------|-----|
| gaaagcagcc   | tcgttatagc | tggatcctag | attagtccag | tgaattttaa | taagaaatta | 120 |
| cactgttgta   | aactcacctc | ttatgcattg | gtcagtgatg | agatatatat | ataaatagat | 180 |
| aga taga taa | aatttgctct | tatatagcca | tttattcatc | attggccctg | tttggcccat | 240 |
| cctcagtgtg   | gctgtgagat | tattgataac | tggtcactgt | cagataaatc | acattctatt | 300 |
| aggaaacacc   | tatataggtt | atgcagaaac | atgcagaaat | gccacctgtc | catacttacg | 360 |
| tggctttaca   | taaacaaaag | actgtcttgt | ctttgtggtg | actgaattta | caacgtcctc | 420 |
| ccctggaaat   | ggaaaagtac | ctatcaggag | atgtatgaca | aaagaaatta | tcaagcctga | 480 |
| cttcatatat   | attatgaaca | gtctagagga | agcatctttc | ttagaactaa | ggaggtctgc | 540 |
| tgaacattgg   | ccacattctg | gactttcatg | aaaatcatgg | acccagagtt | ggggttaagc | 600 |
| cacttagaaa   | aagctgttga | aaacatctca | aagggcactg | aacaattttt | aaattacact | 660 |
| taacatgcca   | ggtatctang | tatctagtgc | ttttagcaat | attatcaata | ttatcaaggg | 720 |
| cccagcttct   | ttgngtcctt | ccccttgcg  | attccccttt | tttttttt   | tttgcctttt | 780 |
| taaaaatnn    |            |            |            |            |            | 789 |

<210> 84



<211> 696

<212> DNA

<213> Homo sapiens

### <400> 84

| atttgacatg | ctgcttcctt | tctgatgggc | tctaacttca | gcttttcggt | ctcattcaga | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| gtagagaaat | taacagattt | tactggcggg | tgttttcaga | ttaagaaact | caaagggcag | 120 |
| ctggaggaga | gacagaagat | tggcaaacta | gacaatcttc | gatctgaaga | tgatgtcttg | 180 |
| gaaaacggga | cagacatgca | tgtaatggac | ctacaaagta | aatgtcaatt | cttgtgtaga | 240 |
| agtaaatgct | ttcacatgtg | ctgttttagt | atacttgtgc | tggcagagaa | aactgtcacg | 300 |
| gcaaagaatg | ccctcattcc | ctcacatccc | cacaaaagcc | cttaaaaata | aaagcacaag | 360 |
| gaggggtagg | tagacagaac | aatggtgttt | ctctctgagc | ctatgaaata | gaacaggtac | 420 |
| ccaaaaacgt | gcaccaagat | accaccacat | gttgtgccga | tggaaaccac | atttactttg | 480 |
| ctggatacag | caatctttcg | atctgttgat | tgtatgaaaa | aaaaaaaaat | gaaaggcttt | 540 |
| tttcatgcta | ataaactana | aacagtctta | agggagataa | aattatgccc | agtctctctc | 600 |
| cgcccttttc | cctaccccct | acnatctctt | tgtcttcttc | actcataagg | cactctcttg | 660 |
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<210> 85

<211> 498

<212> DNA

<213> Homo sapiens.

## <400> 85

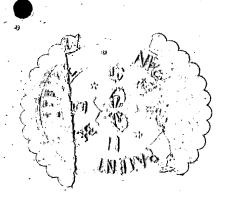
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分冊番号

2/4



出証番号 出証特 2002-3046776

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<210> 86

<211> 750

<212> DNA

<213> Homo sapiens

#### <400> 86

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<210> 87

<211> 696

<212> DNA

<213> Homo sapiens

#### <400> 87

ttcaagatgc ttgtaaatga tatcaaccgt ttatttagtc cacccctgaa gaactgaggg 60 tcctgggaac tgaaccatat caatgcaatc ttttctacat tattaactga agaaaaatgg 120 gtacttttta aactttttt ttttaagatt aggaaacaaa aagaagtcag aaggagccaa atctggactg taaggtgcat acctaatggt ttcccatcaa aactcttaca aaatttctct 240 tttttgatga gaggaatgag tagaggcatt gtggtgcaga agtctctagt gaagctttcc 300 360 caggcatttt tctgccgaag ctttggctaa ctttctcaaa acactcataa taagcacgtt 420 atcattettt gtteetteag aaagteaaca ageaaaatgt ettgageate eeagaaaact gtttccatga tctttgctct tcatctgtct gcttttgctt tgactgaatc acttctgcct 480 cttggtggcc attgccttaa ttgtgcttta ctatcttcag gattatactg ggaaaagaat 540 getttangta teetgggeee taettgttga aaaattteea ttgaaaaget etgettttge 60.0 aagctgatcg gggaatgcaa gtgggttttt gggtacccca tcnaagtngg aaaggtttac 660 696 tcaaacttta aattcctcaa gtcaaaaaat tggttn

<210> 88

<211> 660

<212> DNA

<213> Homo sapiens

#### <400> 88

attecgaaag aaacgtgtea ggeaagaage getagtteae geetgteatt ceaecgettt 60 120 gggaggccaa ggcagggga tcacttgccc cagaagtttg agaccagcct gggcaacata 180 gtgaggecee tgtetetaca aaaaaettaa aateaataaa caggteteet teetteetea atagtectgt tggtggetea cetetetgee tetecagatg tgaggeagat ceacaegttt 240 300. agetattgag ataaggetgg gegtggtgge teacacetgt catteeggee teagatetet 360 tgtgcccagg agttttaaga ctagcctggg cgacctggct ggcaacatgg cctccacaaa 420 nntaaataaa acattttaaa tatataaaca ttgagataat agcatcttga tgcctgtctt 480 cattttttgt cttctgtttt aaggactatt agagacaaac taaccaaaga taattctccc

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<210> 89

<211> 639

<212> DNA

<213> Homo sapiens

#### <400> 89

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<210> 90

<211> 789

<212> DNA

<213> Homo sapiens

<400> 90

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<210> 91

<211> 570

<212> DNA

<213> Homo sapiens

#### **<400> 91**

gagtgttcgg gacgcggcc tgcaggcgcc atggtcttcc tcaccgcgca gctctggctg cggaatcgcg tcaccgaccg ctactttcgg atccaggagg tgctgaagca cgccaggcac 120 180 ttctggggaa ggaaaaatcg ctgctacagg ttggcggtca gaaccgtgat tcgagccttt gtgaaatgca ccaaagcccg atacctgaag aaaaagaaca tgaggaccgt aagcgtggac 240 ccgggacacc cgccggccag cgcactcgcg gcccctgcgt ttctgcgccg cgacccagct 300 agtgtgcagc cgcccggcca ccctcagccc cttcctttca taccttgctt cgaaactccg 360 acaaattatg tcgcccgca ggcaaactgt gggacatccg ttctcccgcc ccgccgccac 420 480 ecceaetgte acceeetget ceageceete geeegggeea etgeagagee geettgaeae tctccctgcg tcgccagcca ccgccctant cgctgctgct ctcatccctc cggtggcttc

| ccttcncttt | ggnagctgaa | gtcaacccas |
|------------|------------|------------|

570

<210> 92

<211> 640

<212> DNA

<213> Homo sapiens

<400> 92

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<210> 93

<211> 687

<212> DNA

<213> Homo sapiens

<400> 93

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<210> 94

<211> 597

<212> DNA

<213> Homo sapiens

#### <400> 94

agetttgtge getetgttae tatggacaag tggaaggaca ttgagettga gaagatgaaa gctggtggga atgctaagtt ccgagagttc ctggagtctc aggaggatta cgatccttgc 120 tggtccttgc aggagaagta caacagcaga gccgcggccc tctttaggga taaggtggtc 180 getetggeeg aaggeagaga gtggtetetg gagteateae etgeeeagaa etggaeeeca 240 cctcagccca ggacgctgcc gtccatggtg caccgagtct ctggccagcc gcagagtgtg 300 accgcctcct cggacaaggc ttttgaagac tggctgaatg atgacctcgg ctcctatcaa 360 ggggcccagg ggaatcgcta cgtggggttt gggaacacgc caccgcctca gaagaaagaa 420 gatgactice teaacaaege catgieetee etgiaetegg getggageag etteaeeaet 480 ggagccagcc ggtttgcctc ggcaaccaan gagggcgcta caaagtttgg attcccaagc 540 gagtcanaan gcgtccgagc tgggccacag cctgaacgag aacgtcctca agcctgc 597

<210> 95

**<211> 752** 

<212> DNA

## <213> Homo sapiens

### <400> 95

| aacgttttgt | tttaagttta | ttttggcatt | gagttaaata | ttaacgccaa | gattcagaag | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| taggtgacag | acctagacta | ttggttaaat | tattcagatt | gttttaattt | taaatatgtt | 120 |
| tcttaaacat | ctgagcaact | ttttgtttga | tacagatgat | gtctaccgta | gaaaagcctc | 180 |
| agaaagacag | tatcagagaa | ggctggaaga | tgaatgagac | tgaacttcag | cagtcaataa | 240 |
| agtcaatatg | aatttttact | attggtttca | gtgcctttta | aaatatactt | ttcagatctc | 300 |
| ttgttctgac | acagcttgtc | ctttatcagc | tgcacaatat | tccaataact | gtttttgcaa | 360 |
| agaatttta  | tagttctgtc | tctgcttgag | tacttcccaa | gtcactgctg | gacagcactt | 420 |
| gtgggaaaat | tatttcctcc | taaaacactc | actcgatgaa | tctagtccat | gaaatatttc | 480 |
| ttaaacaatt | caaggatcaa | tcaggatgct | tttcaagtga | agcccgaatt | gttttcggca | 540 |
| atctttgttt | ttaggcaact | aattataacc | ttatttactt | ttttgcagaa | ttcaaattaa | 600 |
| attatggaca | cattctctaa | tgccagatca | tttaaaccag | ggataattat | gcaggttgta | 660 |
| tttccgccag | ctactaagac | tataaacttt | ttgccnaggg | tgggtgggaa | aattccntga | 720 |
| nttggaccta | cggcaatttc | ctcaatggcc | aa         |            |            | 752 |

<210> 96

<211> 808

<212> DNA

<213> Homo sapiens

### <400> 96

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ggttctaaag catcttttaa agatcttttt ctcccatttt tctaaaaaca aaaaaacatg 360 gacttgtttt aattatgtat taaaaaacaa aacaaggctg ggcgttgtgg ctcacgcctg 420 taatcccagc attttgggag gccaaggcgg acagatcact tgaggtcagg agtttgagac 480 cagcctgacc aacatggtga aaccctgtct ctactaaaaa tacaaaaatt agctgggcat 540 agtgggcana tgcctgtaat cccagctact cgggaggctg aagcangaga atcggttgaa 600 cccaggaagc ggagggtgc aatgaagcca agatcgcgca ttgcactcca gcctgggcaa 660 720cagagcaaga ctccgtttca aacaacaaca acagcaacaa atggaacaan gacctaggag ttgattgacc tccctgaatt gcattangtt gtcaaccttg gtaagggatt ttaaaagttt 780 gngggctcct gaaatggggg actctgaa 808

<210> 97

<211> 681

<212> DNA

<213> Homo sapiens

#### <400> 97

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⟨210⟩ 98

<211> 549

<212> DNA

<213> Homo sapiens

<400> 98

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**<210> 99** 

<211> 738

<212> DNA

<213> Homo sapiens

<400> 99

ctttatcaag gaaattagca caccaagtct gacagaagag tagattgtgt ttgtgcttac 60 ccttcttctc ctaaaattaa gtgttagctt tcaaacttgc ttttgaagtg ctaagaaccc 120 tgatgataaa tgatgaacaa agcctcctgt ttacattgga agcatcaaaa cagcaggact 180 gggccaattc acccattcct gttgatcatt agacattaac tggttgtcca acttcaacca 240 catcaactac aaaatcctga agtgaaacaa agtctaagtt agttgacttt tctttgatta 300 gtctctagtg catttatcac tttctatgaa agaagcatct aatttagatg gcagttgatt 360

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<210> 100

<211> 759.

<212> DNA

<213> Homo sapiens

#### <400> 100

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<210> 101

<211> 579

<212> DNA

<213> Homo sapiens

## <400> 101

| aaaaagagcc | gagtgggaca | aagcctgggg | ctgggcgggg | gccatggcgc | tgccatcccg | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| aatcctgctt | tggaaacttg | tgcttctgca | gagctctgct | gttctcctgc | actcagggtc | 120 |
| ctcggtaccc | gccgctgctg | gcagctccgt | ggtgtccgag | tccgcggtga | gctgggaggc | 180 |
| gggcgcccgg | gcggtgctgc | gctgccagag | cccgcgcatg | gtgtggaccc | aggaccggct | 240 |
| gcacgaccgc | cagcgcgtgc | tccactggga | cctgcgcggc | cccgggggtg | gcccgcgcg  | 300 |
| gcgcctgctg | gacttgtact | cggcgggcga | gcagcgcgtg | tacgaggcgc | gggaccgcgg | 360 |
| ccgcctggag | ctctcggcct | cggccttcga | cgacggcaac | ttctcgctgc | tcatccgcgc | 420 |
| ggtggaggag | acggacgcgg | ggctgtacac | ctgcaacctg | caccatcact | actgccacct | 480 |
| ctacgagagc | ctggccgtcc | gcctggaggt | caccgacggc | ccccggnca  | ccccgccta  | 540 |
| ctgggacggc | gagaangagg | tgctggcggt | ggcgcgcng  |            |            | 579 |

<210> 102

<211> 769

<212> DNA

<213> Homo sapiens

# <400> 102

| tttaaaatta tgaaaagtaa | ggaaattctt | atttaagcaa | ggttattaat | tggacattac | 60              |
|-----------------------|------------|------------|------------|------------|-----------------|
| tgtatttttg gtacctattg | tatctgagag | tctagagaga | gtaatagaat | cataacatta | 120             |
| ctattctaaa atagtatctt | cattgtttaa | accctattca | cctccttttc | ctattgcatt | 180             |
| tgactttttc atagataaat | ctgaagttat | tatttttta  | aataatcctt | tctacatggg | 240             |
| agcagtgtat attaggaaat | tttcaattac | tttggacctg | cacctttgca | ttgtaggtca | 300             |
| gaacctacaa aaattccatc | ttggaaaaca | ttttagattt | accttgtatt | cacacacccc | <del>3</del> 60 |
| tgcaaagtgg gtctttgcaa | acaggaaagg | taaaagattt | atttttactg | caaaatcatg | 420             |

cctttatata ggattagtct gtggattatt tcaggcaaca atgagtagat ttttgaagga 480 aacttcataa cacagttttg gagccctatc ttctgtaaca catttccaac ctttggaaat 540 aaccttgatt ttccaacttt taacctgata ccaacanaaa tggacaaaga taatatcaca 600 tggaattatt ctgaagagcc agctgctgag aagttccagg agctgtaaat tagacaaaag 660 catccattta tttgggagta agttacaata tggcntanct taaaaaatat ataatgattc 720 agggaggtat tttaatggaa ccttatgtgg caatttatgg gngaactaa 769

<210> 103

<211> 686

<212> DNA

<213> Homo sapiens

<400> 103

agttaagtaa atgtagtatt ggctaagtta ctgtaagtcc tcatcttctg gtaggtcctg 60 taactctaat taggcatttg tacattttta gcagcaaaat tgcctcagca gagctcccag 120 ttttattccc agttgtggct gaaaagcaaa gccatggcat cagtatcctt gtgcaatcgg 180 aggttgctgg gctttcacca cctgtgttgt taaccttatt tcctggagga agaaacagat 240 gaaacaagtg cctaactccc tttatcaaac acagccaagg acagcctctt ttaacatgtg 300 acttcatact tgaggaaaag gagagttgac agctgtattt aaaaacccat ggagccgggt 360 gcggtggctc acgcctatga tcccagcact ttgggaggcc gaggcaggcg gatcacaagg 420 tcaggagatt gagaccetce tggctaacae cgtgaaacce cgtetetaet aaaaatacaa 480 aaaattagcc gggcgtggtg gcgggtgcct gtacaggagg ctgaggcagg agaatggcgt 540 600 gaaccegcga ggcggagctt gcagtaagct gagatcgcgc cactgccctc cagcctgggc aacagagcaa gactccatct caaaagataa atagataaan taaaaaccca tggaaatggn 660 ttaagaaaat ggntctgggt acacca 686

<210> 104

<211> 817

<212> DNA

## <213> Homo sapiens

### <400> 104

| gattaaatgt | tctgagtaag | tgagtttgta | gacattttct | tgtaagaaaa | tgttccatgc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tttactctgt | tttggacatt | ttcttttgaa | aaattttgag | atagaaacct | taatatcatt | 120 |
| tcatatattt | acagcatata | gttaatttga | gtagagtcaa | attaatctta | ctttagaatt | 180 |
| tgattactaa | gtattagcat | ggataataat | gcttcttttg | cttaaatgta | aaaattaggc | 240 |
| cgttttacta | ggtgtacttt | gtcttaatca | tattcctatt | tttttataca | gctgtgcaac | 300 |
| catattgctt | ctgggaaaaa | atgtcaatat | gtgggaaact | gttcctttgc | tcatagtcct | 360 |
| gaggaaagag | aagtttggac | ttacatgaag | gagaatggga | tacaagatat | ggagcaattt | 420 |
| tacgaactat | ggctcaagag | tcaaaaaaat | gaaaaaagtg | aagacatagc | cagtcagtca | 480 |
| aacaaggaaa | atggaaaacá | aattcacatg | ccaacagatt | atgctgaagt | tacagtggac | 540 |
| tttcactgct | ggatgtgtgg | gaaaaactgc | aacagtgaga | agcagtggca | gggccacatc | 600 |
| tcctccgaga | agcacaaaga | gaaggttttc | cacaccgagg | acgaccagta | ctgctggcag | 660 |
| caccgcttcc | caacaggcta | nttcagtatt | tgtgataggg | atatgaatgg | cacctgccca | 720 |
| gaagggaaca | gctgtaaatt | tgcacatggg | aatgccgaac | tcatgaatgg | ggaagaanga | 780 |
| agagatgncc | taaagatgaa | agccaacaan | gcacgaa    |            | e t        | 817 |

<210> 105

<211> 773

<212> DNA

<213> Homo sapiens

## <400> 105

ctggtttcaa gcacccaga gggagttgta tccttttgtg tgtgccctgt ggaattttca 60 tggcaacata agttgtattt cttcatgact cactgccata ggaagaccac ccaaaacata 120 ccctcttctg taacccaaat ctcagcgtgt gtccttattt tccttgtttt cagcatgtcc 180 aagtgaagcc attaagtagg taatatactg ttagacacag atcatggtgc ttgggaaaac 240 aacacccaag cctcgtgatt aataagcact gttaattgtt aagctgctct tgctggtgtc 300

tgacctcacg gggtttgtgc tgtgacagct ctttcatgtt gatgaggtaa atgagtctct 360 gccatgatgg ccgggagaag ccaggacaga gtatcagatc gtgtttcacc aggaaaacaa 420 ggttgattta ctgtgttaca cgagggtgaa gtggacccag caccactgca ccccgtgctt 480 tgattccctt gtatgctaaa tatgcaagca caaaacagct ttaacacaat tttttaccta 540 gaaaggagcc tggggctgca tccaagtaca tttaacatgt gaaaattgag ctgctttgaa 600 cttgtatgtt tttgataact gcttggtatg cttcctggan gatcacctgt aggcttttct 660 ttccaaatcc taaatccctt tgattgaagt gccaagacaa gatagctcct cattgaataa 720 773 ctccaagtcc canaantcct ccctcaatca agaagtttga aaggggnaac aag

<210> 106

<211> 776

<212> DNA

<213> Homo sapiens

#### **<400> 106**

gaaagtaaat aaggaaatca gctctctaag gcaatgctat tctttttata ctctcaggat 60 agaagatett ggegttgtgg tagattgeet teetgtgete aecaattggt aaaaacaata 120 tttttcagaa aaaaaataag attaaaggag gtcaaattat ggcccatcca tatttttata acttggtatt tattttagtt tacaggaaga aaaacaatat atctcacttg gctgctgtgt 240 tgacttgttg cctctagtaa agtcactact taaaagcaaa tttgaagagt aagtgctaat ctgaatcttg attcattttt ctttttcagc atccttgatt ttgtgctttg tgagtacata 360 gtagattggg ctccatgaga catgcaaggt ttctgttttc aagaagctaa tagtacaatt 420 aggaaaagaa tatgaaatga ctaaaggaca attataaaag catctctaaa caaattacat 480 gaaatatact tttgtgtaat agatcatgaa ggtaacaatt ttttaaaagg gaagggacca 540 atgtgtgtgt gtgttttttg ggagggaaag tatcatcttt tataagaagg gctcttagat 600 gaaaacactt gaattttgta acaaaatgtc atttcagata tgttatagtt ggtttaaact 660 720. gggcttcaag cagtcattaa aaaggtggtg gtcaagaact atcatccaaa nacaggaaat tataaatgat ngggtgaggt aataccttta aangattaaa cctcaatgcc ggaaaa 776

<210> 107 <211> 794 <212> DNA

<213≯ Homo sapiens

# <400> 107

| aataagtagc | ctccaggcat | tcccttccac | caagaggagc | aattgttttt | taaatagccc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tttggcgccc | agtctattac | taaaccatat | gagtcatttt | ttaatattac | tgcatgtgag | 120 |
| ttaacatagt | cttcccaaat | taaagtttta | gatgggccct | caaaattttt | agggcatggt | 180 |
| tttcctgcag | gtttatatgg | aaagtatggg | gtccctgact | tctcgcaaca | gtggcctaca | 240 |
| ctgcctttca | gttctgtacc | taggcctcca | aagcacttta | gcctgtgggg | cttgccagaa | 300 |
| ctcgggttcc | agctcctgga | atggacagtt | ccctctggc  | tagggttgat | ctaatgttcc | 360 |
| ctctgggtta | ctggctgagt | tctgccctgt | gtggctttct | gctgtgccag | ggctgcactg | 420 |
| agttcaaatg | cagagtetca | caatcattgt | attcttcctc | ccccaggagc | acccattctc | 480 |
| tctttacacc | aattgggcac | tgccagggga | tgaanangga | tgatgttgac | aattcaagac | 540 |
| tatttcttac | cctcttcagt | gcctgtttcc | ttaatatgat | aataaaccag | gtactgcgat | 600 |
| cactcacctg | attattggnt | cttaagaagg | ngcttttta  | atggaattgg | tcagtttgat | 660 |
| aattctgtcc | ggagggatga | ctgctggagg | atctantaag | ccatcttgct | ctgccttctt | 720 |
| ggaacacata | aaaatcacag | ttttgggcaa | ctgtaagtca | aagtgttgga | anttaattat | 780 |
| tcantttttc | cttg       | •          |            |            |            | 794 |

<210> 108

<211> 717

<212> DNA

<213> Homo sapiens

## <400> 108

atctctttgc attattacaa gttgttgtta tttttagttc tatttatatg aaaaatgtac 60 tttttagccc acaaaaatag catagcagca gcttatcaaa atgtcccaga caagtttact 120

tcaacaaatt agtaacacct tcatgcttcc tgtggtggaa gaaatgcaga gtccacttcc tcccagtgaa catctgagcc agatttctgc tccactcggt cccccttccc acctcttaca 240 300 gccatgaaat aatgtgagag tatttgtttc ccctgcaaag ggaagagggt ccagagacaa 360 aagggaagtt agtattcact ggaagcctcc ctgtacaagc aacagtgtta ggacttttat 420 acacattttt acaattatta cagcagttct caattattga aacagagggt aggcatttcc 480 cettttteag aagggaaaag tgagaattaa gttaatteea aagteacaca getagtgaga gaaaaagcct ggacaggaac tcagactgta tgactccaaa ggctaagtgc attctataca 540 600 cacaggeege ecteetggea gtgagagtte aagatetgtt ggagaaaact cagaccatgg gtttcttgca acttctgctg ggngaacaat taaggtgncc gttcccccgt ggggaagtgt 660 ttcaaagtgg aagcaaccac ccaaggggga aaaagtcctg gggcccttgg gngttta 717

<210> 109

**<211> 836** 

<212> DNA

<213> Homo sapiens

### <400> 109

60 tctctggaac agttgagaga caaatgcata agcattttag aaagaccaaa tgtgaagcca 120 tactccaaat attcaacatc actgcagtta tttttgagtt tatcaagatg tgattacagg 180 agagtettae tgtagteetg ettttatgtt teeaaggtgt ttgtgeatgg aettteetet 240 tttccaatag ccaaacttgt ttggatgtga tccaagatgt accaaaaggt attgaaaatt aaatgtaaga gtagtcttct agcaatattg caccattccc aggcagtttc caacgtgcat 300 360 cagcatgtct gtctccagtg gaacaagata acttccagcc cctgaacccc tggggaaact cettecetet ttactgtatg ttgttgccae tgtaggagaa ateteteete tgcctgacte 420 480 tgcagctgct ttacccagaa cctcaggagg aactctgagt ccagagccag gctgagttca 540 gccaggcaag tetggcettg gggetgtata tatetgtete agacategte tgtgttttea 600 tatatttttt gactttttaa aagatgaccc agaccacaat agtatgttct atttttgttt 660 tgttgtgttg tgtttttcca ttacattgct taagtacagt atttctagga tagaaaattt 720 gctttcttgg tctgccttgg gaacatacct ancaattaca acattgattt tcataaaaat

tgagtttaaa gttccaactt gcaaatgaac ttttggataa ccatcaattg ttanggggaa 780 atgtgtccgg attaggaatt tcctaaggaa ataaccacnn aaatgaaggt ttaaaa 836

<210> 110

<211> 759

<212> DNA

<213> Homo sapiens

### <400> 110

60 tgaacaagaa atcttttttc tttagctggg catggtggct tacgcctgta atcccagcac tttgggaggc taaggcagga gaatcgattg cgcctaggag tttgagacca gcctgggcaa 120 tatactgaga cctcatctct acacaaaata caaaaatcag gtggttatgg tggtgtgt 180 ttataacccc agctacttgg gaggctgagg tgggagaatc acttgagccc aggagttgga 240 300 ggctatagtg agtcatgatt gtgccactgc actccagcct gggtgacaga acaagacctc 360 gtotottaga agaagaattt ttgtototaa tgotttgota aaagaaaago aatatotaat 420 atetttett tgtteaaaga aaageagtat etaaaagtge agagttttet geatttteta aagggaactt gttgggaggt gctctctcct gatgcgctgt tcttgagtgc catccatgat 480 540 cagggttagg tttggaacag agagggagga gaagacagag aggctctttt gggataagtg 600 agcaagaggt gggatggatg aggaaatgag gttaaacgag acccgttctt gtaagagcaa 660 ggagagtgcc tggcgtggct cctggttttc catggtgggt ggagggnccg ggcaaccgct 720 gatgccctgt tgggggaagg aacnggaggc cactctgcaa aagggggctc tcgcttcccc 759 aatgtcctca tnctcgaaaa agcaaggcaa ntccagtta

**<210> 111** 

<211> 508

<212> DNA

<213> Homo sapiens

<400> 111

atgaaaatca atatgaaatt atatgactgt ttaaaatggc ggcttcaagg cgtttcacgg 60 gtgtcccgga caggcgtgga ggtggggcgc aggcgaggat gaagcttgag ttggccagga 120 gtcggaaaac gattgcaggc gggaccgcgt ccgtcggggc tgaggaaact tagcgtggca 180 gaccctaaac tgggataact ttagggatat ggccttcttt tcccagttgc ctcaaactta 240 300 gagcagcgtc gtctttagcc gaagattcat tttcccagca ttttccttct ccaggcggag tagttggaga cagagggcaa gccagaaact gaccttccca tctcctcatt cccttccatc 360 aagaactttt catcgttcnt tccccaccct ggtttgtaaa tggtatttgg cttcataaaa 420 480 acgtttgtcc acaggtgccc tgctccanca gttcgctcca gcantatagg aagttaccag 508 aaaanaaatt tttttttatt gaccttgg

**<210> 112** 

<211> 879

<212> DNA

<213> Homo sapiens

#### <400> 112

acctaaacat ggagacagcg ggcgctgcaa ctgggcagcc ggcctctggg ctggaggctc 120 cggggtccac gaatgaccgg cttttcctgg ttaaaggtgg aattttcctt ggtaccgttg 180 ctgcagcggg aatgctagct ggatttatta caacattatc attggctaaa aagaaaagcc 240 ctgaatggtt caataaggga agtatggcca cggctgcatt accggaaagc gggtcttccc ttgccttgcg agctctgggc tggggctccc tgtatgcatg gtgtgggtt ggtgtgatta 300 gcttcgcagt ctggaaagct ttaggagttc acagtatgaa cgactttcga agtaaaatgc 360 +420aatcaatatt tccaacaatt cccaagaact ccgaatcggc tgttgagtgg gaggaaacat tgaaatccaa atgagatgag catggatgaa tttcaaaatg cttgttacag aaaggggtgg 480 ctctggagac accatgacag caaaaggact gggactgatt tctcccagga acatgggcag 540 attgctgact gaaccagtgc actggatagc attcagcctc atcacaggaa agtatgtgtg 600 660 tgcgtgctgg gggaaggtaa agttttccca cagttaagaa gactatttaa aaatagtaat tacaggaata actteettat gttggggggg acceatagga aatgattetg tttgtaacag 720 780 ttgaagcaaa tttcatacta aaaaaagttt ataataaaag tatgataaga aaatatttat

| aaaacaganc | ccccaatagc  | aatatactgc | aatgtgtcca | aattaaangg | agtttcaaaa | 840 |
|------------|-------------|------------|------------|------------|------------|-----|
| agccnttcct | tgtcaaatat  | attgacaaga | accttggaa  |            |            | 879 |
|            |             | •          |            |            |            |     |
| <210> 113  |             |            |            |            |            |     |
| <211> 649  |             |            |            |            |            |     |
| <212> DNA  |             |            |            |            |            | •   |
| <213> Homo | sapiens     |            |            | •          |            | -   |
|            |             |            | ,          |            |            | •   |
| <400>-113  | • • • • • • |            |            |            | ;          |     |
| gatgaaccag | tatggatttg  | cttttctaag | cctcctgttg | gttactaatc | tcacttggca | 60  |
| cattataact | aaaggaatcc  | cctcaattca | aaagcataga | tggatacaaa | tgtcagaccg | 120 |
| tgggtttaat | ttgtttagaa  | cacatggcat | ttcttcacaa | ggtaacctgc | tgtatttatt | 180 |
| tattttcttt | tggttaaata  | taatttccaa | actttgtggt | caggcagcgt | ctaaggttac | 240 |
| gttaccacag | actgacagtt  | ggtatatgta | ccagccaatc | ccttcattaa | atgtatacag | 300 |
| atttagttaa | gtagcattaa  | ataggattct | tagaagtatg | tcctcataga | acttttaata | 360 |
| cttaaggctt | tgtaaaaact  | atccatgaag | ggaaagctcc | tcagcataac | tgctcaggga | 420 |
| aatagggcta | aataactgaa  | cattaaataa | ttggttaaag | gtgctgttag | tcgagccţca | 480 |
| atgcttgcta | caaggatgta  | tgtacaagga | ctgactttaa | taatttgcát | tatattgtcc | 540 |
| caaccagtag | tttatttttt  | gccacggaga | tgtanaagat | attacaagct | actggatgca | 600 |
| ctggtcagat | taacntattt  | cattaaagaa | gttgggagaa | caaaatang  |            | 649 |
|            |             |            |            |            |            |     |
| <210> 114  | ,           |            |            |            |            | , : |
| <211> 709  |             | •          |            | ,          |            |     |
| <212> DNA  |             |            |            |            |            |     |
| <213> Homo | sapiens     |            |            |            |            |     |
|            | • •         | •          |            |            |            |     |
| <400> 114  |             | ,          |            |            |            | •   |

attgttttta aaggaactaa ggtctttgta gctgcatgtc agctagtcat cagttacatt

ttagagacag gatttttgtt tatacttaaa cttcagacaa attggcagca tataattgtt 120

cctttataca tgagataata tgatgatata actgatgttt aagaacattc ttattgtaag acagtttctg ttttgccaca gcaacccaaa ggacagttaa gatatgtacc atatgacctt 240 tttgcatata taccaatgtg aatttacttt tacattaatc atttccccca aagagttcac 300 cctatgtttt gacagaacag ttggcatttc aactgataag gtatttctag ttttaaaata 360 attiggtgit tgtattitgt titgaatatt titaaagact aattitaaga atgcactitc 420 tataaagtat atgcatctta gaaaaccagg aactggggag aaagtttttt aaatgatgat 480 tgaagataga ttttattgga gaaatgcttt actgatgtgt attttagtgc attttaaaaa 540 cctaagtatc tggtagtgtt ccccttgtag tgagcatgag attaaagttt agaacttttt 600 aagacaattc cttttttgtg ggtgtgtact cattaatgcc tggtcgtcct ttgcaattta 660 709 gataaatgat ataacattaa actcaanggg ggttganttg cantaggga

**<210> 115** 

<211> 734

<212> DNA

<213> Homo sapiens

#### <400> 115 ⋅

attgagtttc tcgctacttc tgccactcat cacacttgct tcccagagct ttgctgggtg 60 tgctgaagtc tccagagaaa gtggggaata tgggtgccta gagacttcta gggggtgttt 120: tcagccccta gagagtagag aagtgtgaga aggggttggt ccccgaatat tctgtagttt 180 tggggaagaa gcaatgggga cagtggagtt ggttgcctta agagaggcta tggtcccaag 240 agatgggact tggagagtet etaettgeat teetggetaa geeettaata ttetegeace 300 360 cctccttgca agactagttc cttttgaggt ggttcttggc tagcttttga gaggctgcag tggctgtgtg cccaggctta agtcctagct ttctccccac tctttacctc ctaggaaccg 420 ggcccatcct gggggaggca gggaggagct cctttttata gtccacatgt aggctttgtg 480 tataggetet getgetteet teeggeeetg gecetteetg gtgttggeeg gtggeeetgg 540 cttcagcaag actcaggatg cagagtaaac ggggcaaggc gttctcctac agaagactgg 600 catecetttt taetgageee aageetggea cagaggange tggagttagg aageaagaaa 660 720 acgaggtgac ccagtccttg atcctgagaa accttgtgaa tctggnccaa tgćaagaaaa

|   |            |   | 4          |            |            |     |
|---|------------|---|------------|------------|------------|-----|
| ccgctaatgn                              | ccaa       |   |            |            |            | 734 |
|   |            | •                                       | •          | •          |            |     |
| ` <210> 116                             |            |   |            |            |            |     |
|   | •          |   |            |            | e e        |     |
| <211> 677                               |            |   |            |            |            | •   |
| <212> DNA                               | •          |   |            |            |            |     |
| <213> Homo                              | sapiens    | •                                       |            |            |            | :   |
| •                                       |            |   |            |            |            | :   |
| <400> 116                               |            | , |            |            |            | r   |
| aagcccggcc                              | tggcggcggc | ggtggcggta                              | gctgccgtgg | cggctctgc  | gcatgctccg | 60  |
|   |            |   |            |            |            | 120 |
| • | · · ·      | ctcgccgccc                              |            |            |            |     |
| tctgacttca                              | tgtgaaagat | ggctaatgca                              | gaagtgagtg | tcccagtggg | ggatgtggtt | 180 |
| gtggtaccta                              | ctgaaggaaa | tgaaggggag                              | aatcctgaag | acactaaaac | ccaagtgatt | 240 |
| ttgcagttac                              | agcctgtgca | acaagggatt                              | tatgaagctg | ggtcggagaa | caacacggca | 300 |
| gttgtagcag                              | tagaaactca | cacgatacac                              | aaaattgaag | aagggattga | tacaggcact | 360 |
| atagaagcaa                              | atgaggatat | ggaaattgct                              | taccccataa | cttgtgggga | gagcaaagcc | 420 |
| atcctcctct                              | ggaagaagtt | tgtatgtcca                              | ggaataaacg | tgaagtgtgt | caagttcaat | 480 |
| gatcagttga                              | tcagccccaa | gcactttgtt                              | catctggctg | gcaagtccac | tctgaaggac | 540 |
|   |            | tgggtgggat                              |            |            |            | 600 |
|   |            | acaaaagttt                              | • • •      |            |            | 660 |
| atcttccgat                              |            |   |            |            | -          | 677 |
| atottoogat                              |            | •                                       | ,          |            |            | 077 |
|   |            |   |            |            |            | · . |
| <210> 117                               |            |   |            |            |            |     |
| <211> 659                               | •          |   |            |            |            |     |
| <212> DNA                               | •          | •                                       |            |            |            | •   |
| <213> Homo                              | sapiens    |   |            |            |            |     |
|   |            |   |            |            |            |     |
| <400> 117                               |            | •                                       |            |            |            | •   |
| •                                       |            |   |            |            |            |     |
|   | •          | gtccgggcgc                              |            | •          |            | 60: |
| ggccagcgct                              | cggccatgcg | atccgccgcg                              | cggaggggac | gcgccgcgcc | cgccgccagg | 120 |

gagetgagge acgeteggea catgagttee tgttteatta etgtgggeag catetteacg 180 cagcacgctg gcaccagaag gacaaaaggt agtagatcga cgctgaacag tttcaacaca 240 ggggaaaggg gaagaattaa ggaacctcta tgattctgat ttctgaaagc agccacagtg 300 agcgctctgc aatgagtccc tttgcctggg gcatgcaatg cagagacaca aacggacaca 360 catgggcgca cgcgcgcaca cacacatgct ctgactttgc aagctgaagg ctgtgattgt 420 gtggactgcc tcgtgtccct cctccttttc actgaatang gaggttcatg ctgataccac 480 agggeegaea eetgegttet gegtteacae etgegtggat ttetgeeaee etgaeteeet 540 tettgtetge atccaggtgg aagegtetgg aangtteatt acaegaeeee geagtteeae 600 cccganggaa cgggggcctg ctacgggcga ngcgtctgcc catgctccgg ggaaggcgt 659

**<210> 118** /

<211> 698

<212> DNA

<213> Homo sapiens

#### <400> 118

ttaaaatget attatgaaac agatteatte atteatteat gttgeceace tggteeceat 60 agtcatcgga gttttccact cttgacgaac gaatacttgc cctattttcc aagctaagtc 120 ttgaatacct tgtaatgttt tacttcttgt ggcatcctgc actttgtgta aaatcaggag 180 tggggagtgc caataaatat ttgattgact aattgacagc ttgagtcaag gttctggaag 240 agaataaata caagggaaag gcattccctt tttcatttag accatatttt gcctaagcca 300 aatggacgat ttacagctaa tcattgcgtc ttaaccaggg acagctggag cttactgctt 360 420 gcctcctgcc tagtcgtctt tattccttct ataaaggcag aaaacagaag ggctctgcac acagcagtca cagacgetca teaaagacaa accaetgaca tggaaactga acaagaaaag 480 gcttcctggt tcaaggctgg cttttgggag ccatgttcaa gcatgcccta agtagcacag  $\cdot$ , 540. 600 tcagcagcct ttttccttca ctctttangg gctggggttg aggaacaaga ttccctcaat tttccaacaa ataacctaat tcagtgaaat aaaaaaaangg ggggtggggc aatggtgcaa 660 698 tcagtcantc atatgccaag ttgtanccat gttaagta

<210> 119

<211> 697

<212> DNA

<213> Homo sapiens

### <400> 119

| tgtaaaatgt | ggacaataat | aataatgcta | acagtaaaaa | ctacctcata | ggattgatgt | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| gaggattaaa | tgagctatga | aaacctctta | gaaggtacct | gttagctagt | actcagctca | 120 |
| gtgagtatta | actgttttgt | tattaagacg | tgtgtgtctc | tgccatttgt | atttaacacg | 180 |
| tgtccttgtg | cctggcttac | ctccctgtta | tactgtaacc | tccgtaagga | caggcatagt | 240 |
| gccccttct  | tccttatctc | tttactgctt | gtattagtcc | atcttgcgct | gctacaaagg | 300 |
| tacacctgaa | gctaggtaat | ttataaagac | atgagattta | attggcttat | ggttctgcag | 360 |
| gctgtgcagg | aagcatattg | ctggcatctg | cttctggtga | agacctcagg | aagttgcctt | 420 |
| atggcagaag | gcacagggga | agcaggcagt | cacatggtga | gagagaagga | gcaatagaga | 480 |
| gaaacaggag | gttctttcaa | ccaaccaaga | tctcacgtga | gctcattacc | acggggagtt | 540 |
| caccaagaca | aggatgaagg | attcgcccct | atgacccaat | acctcccact | aaggcccaac | 600 |
| tccaacactg | gggatnacat | ttcaacacaa | ggatttggan | ggganaaaca | tccgaacaat | 660 |
| atcactggct | tttccgggct | gtaaaacaaa | tttgggg    |            | .a         | 697 |

<210> 120

<211> 634

<212> DNA

<213> Homo sapiens

### <400> 120 ·

tcagataaag cccaaactcc tatccattct tcccaggtgt gatggggcac cccgtgccct 60 ccagcctcct cattcccact tttctcacta tgttggcttt cgtttaggtc tctgaaccct 120 ccaggctccc tctggccaca gacttgccac ctggctagct ccctctgcct acccctagcc 180 tctgagagcc tttctgcctc ctctgatgag gcccaatccc ctagtaaatg attttattta 240

<210> 121

<211> 740

<212> DNA

<213> Homo sapiens

### <400> 121

ccctgggacc tcatcaggcc acggattgtg tgaatcagca gaaaatagga ctttcctaag .60 caaaacagga aggaaagaaa ggatggagtg tgaaacagat gaacaaaaac agggctctga 120. tgagaacatg tcagaatgtg aaaccagcag tgtgtgtagc agcagtgaca ctgggctctt taccaatgat gaagggcgac aaggtgatga cgaacagagt gattggttct atgaaggaga 240 atgtgtccca ggattcactg tccctaatct tctgcccaag tgggctcctg atcattgttc 300 tgaagtagaa agaatggatt ctggattgga taaattttca gattccacat tccttttacc 360 ttctcggcca gctcaaagag ggtaccatac tcgcttgaat cgtctacctg gagctgcagc 420 tegatgeete agaaaggge gaagaagget ggttgggaag gagaccagca taaacaettt 480 ggggactgag aggataagcc atatcattag tgaccctcgg cagaaagatt tctggttacc 540 atcagctggg aaaagagaac gaaatcagtt caatcccctg tctccccttt actccctgga 600 tgttcttgcc gatgcttctc accgaaggtg ttcaccaagc acactgctct gccanacaag 660 gcaaatgtac actgggggac caccatgttc acgtgtcatc aagaggaagc ggaaancaat 720 740 gggcacagna tctttgtcaa

<210> 122

<211> 584

<212> DNA

<213> Homo sapiens

### <400> 122.

ggccgaggga aacacaaccc caagcagcct ggagtaagtg gtcccgaggc agctcaagac 60 agtttggttt tattcatttc agagagacag gaattgcagg gaaaatcatg aatcagtgcc 120 180 tggaaggtgt aagttccatt ggcagaaagg gtgggacctg tggaagggg gttagaaggc 240° acaggtagtt gagggattct gtaggtggca gctggttgag agtgttgaat ctttgtctaa 300 agtttggagg aggtaggaag gaatgctgaa ggaagggggt ctgttatctg ccacttcatt 360 ccatcccage caaaaaacag acctgtttct cgagatttta tgaattctaa ggcgtaactt 420 tacctttgcc ttgcgtggcc ttaggtcttg tttgtaattt ggtatcttgt tgccacaagg agtotgtttt tocagtoaga taatgtotgt ttttacatga atgtgcgtca gttgctgcat 480 gtaaactcct aaagggagan ggtataangg agacctgtct caactcccat cctgtcatac 540 agaggcactc aattttcang gttttttggg ggttcccttg gcaa 584

**<210> 123** 

〈211〉 730

<212> DNA

<213> Homo sapiens

### <400> 123

accaacgcct actccccgt gcagcagga gtcatcatca aaaggaagag tggggagatc 60 ccatgccct tggccgtga ggcgtttgcc gctcacctga gctacatctg tagatacgat 120 gacaaataca gcaagtattt catttctcat aaaccaaaca agacctggca gcaggtgttc 180 tggttcgcca tcagcatcgc catcaacaat gcctacatcc tgtacaaaat gtcagacgcc 240 taccacgtgg agaggtacag ccgggcgcag tttggaggag gactcgtcag agagctgctg 300 ggcttggagg atgcctctcc gacccactga tgctggggc gcaggactcg gtcaagggag 360 gggcaagagg aggaggaga cctgccgttc caacttgccc atcagagacc cggacacgc 420



ctggtgtgt gcttgctgcc tggganggat gcacagggcc tctggaggga caggatggac 480 ctggtcagag gacggttgct gtcctcattt gcattccaag aagagcatgt cctccctcga 540 gaaacagtgc cgccggtgtg atgagcactt acacccacgt tctcaagggc aaattctctc 600 atgacatccg tggagcttgc gangcaacgt ggactggtga ctgtgaagga aggccccntt 660 gtaaaatgag ctggagcacg ctctaagaga gatgctgctt cctaaagatn tacagcaatc 720 tgggacntgg

<210> 124

**<211> 752** 

<212> DNA

<213> Homo sapiens

#### <400> 124

aatgctgctc tggtttcttg cgcgcttggc gctacaggga gtgcgggcgg cgactccttg 60 cgcaagtcag cttgcctggg aaagggcttt gtggctgaaa gcgactggtt ccttgccaca aaggeteege tggegtttge ggtteagegg eegteeetga gtaagatage eacttttete egacgetgee aatageette tecaagtget geaggettte ategetttge aggageeatg: 240 cctcggggac ggaagagtcg gcgccgccgg aacgcaaagg cagctgaaga gaatcgcaac 300 aatcgcaaga gccaggcctc agaggcttca gagaccccga tggcggcttc tgtagccccg 360 agcacacccg aagaatacct gagcggcccg gaggaagaca caagcaccct ggagaaggnc 420 tccagtaccc cttcanaagc ttcgagcact ggcctantgc aaaagccggt taccggagca 480 attttcaagg caacaagaaa agtctcctaa tgtccatatt aagccctcat cttcatcatg 540 ggcaacaacg caaaggaggg cctggtgtgg aaagtgctgg ggaagttagg gatgcaacct 600 gggangcaac acaacatett tggagatteg aanaaggteg ttacagaaga atttgtgeee 660 aaaagggtat ctganttata agccagtgcc ccgcaacaat ccaatggagt ataagttctt 720 ctgggggcct ccaacaanac ntgggaatcc aa 752

**<210> 125** 

<211> 796

<212> DNA

<213> Homo sapiens

**<400>** 125

cctactatgt aattetgtaa ettttttee tgaatgttta ggtetatttt ggeatgeagg gattaagaaa atagctatct gagcatatat tttatagttc actaatgaac cctactttga 120 ccctgtgggt taatgaatga aaagtatctg ctattatggt gtggtttcat cttatcaatt 180 acatattttt gttttgaaat ttgtcacctt tgtcttcacc attcttttct cttggacaga 240 300 ctgttagece ettaacteat gtaettgeet tgaettaagt taecagtetg tecaagagaa aagaattaca ttcatggcaa atgcccccag tcaggcacaa cataccatat acataatatt 360 cttgatgage ttaaagtage cacacageae tcagggcage ctccactaae tgattggnaa 420 taageetatt tgeeatatet eeetgaaaet ttetattaae aaagneacaa aaegettaaa 480 caaagaaaaa ttagataata tcaatagccc atcttctaac acattgccta gctcaatact 540 ttcaatacat attttccaaa ctaaaaatta aaatctcaac tetttaagag aagtttegta 600 antttggagt ataaagagan tatcctgggc aatataagtt ttaaatgcca atataattgg 660 aaacttacaa tgacatttca agtgggtttt ggcaatggtt ttcccaaagt anggggaacc 720 tttaccaacg gaanggtaca caagtggatt ttccgggggg gttaaaacaa gattgaacaa 780 ttttttaant. tttaaa 796

⟨210⟩ 126

**<211> 644** 

<212> DNA

<213> Homo sapiens

**<400> 126** 

aagaccgtcc eggatggcct eggggactgc cagtgtgtgg aggtgagctc egggattgcc 60 ggcatteeeg ettetgetgg ttgetteatg etgeaggetg eggeegteag eeetegeteg 120 cattggtgge getgaggtge eggggeagea agtgacatgt egtegggeet eegeeget 180 gactteeee getggaageg eeacateteg gagcaactga ggegeeggga eeggetgeag 240

| agacaggcgt | tcgaggagat | catcctgcag | tataacaaat | tgctggaaaa | gtcagatctt | . 300 |
|------------|------------|------------|------------|------------|------------|-------|
| cattcagtgt | tggcccagaa | actacaggct | gaaaagcatg | acgtaccaaa | caggcacgag | 360   |
| ataagtcccg | gacatgatgg | cacatggaat | gacaatcagc | tacaagaaat | ggcccaactg | 420   |
| aggattaagc | accaagagga | actgactgaa | ttacacaaga | aacgtgggga | gttagctcaa | 480   |
| ctggtgattg | acctgaataa | ccaaatgcan | cggaaggaca | gggagatgca | gaaagagctt | 540   |
| gcagaagcag | caaaggaacc | tctaccaant | cgaacaggat | gatgacattg | aggtcaatgt | 600   |
| ggatgaaact | tctgatnaca | cagaanagac | ctctcctgtg | cgaa       |            | 644   |

<210> 127

<211> 505

<212> DNA

<213≻ Homo sapiens

## <400> 127

| aaaaaaaaag | taaagggaaa | cagacatgaa | cactaggtga | catggagtgt | taggggcgct | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| atggtagaag | tctgcagaga | gtgcaatggg | cgtccaaatg | aggaagtgat | cacttgcaca | 120 |
| agagtgggag | gcttggctgg | aaaggcttct | ctgaatagga | tgacatttga | tctgtgtttt | 180 |
| gaagggcatc | gttggcaagg | taagtaatcc | aattaaagga | ggttgcctca | gctaaagcac | 240 |
| agtatgctca | aaggtgcgga | tcatttgaaa | atttgagttc | aggtgcagta | ggggtaaggt | 300 |
| aagtatccaa | cagaatttcc | tacaatgatg | gaaatgttct | atattgtcac | tgtccaatac | 360 |
| ggtagcctct | agccacattt | ggccaataca | actgaagaat | tgaatattaa | ctttcattta | 420 |
| attctagcta | atttaaattt | aaatagtttc | atcagttagt | ggctaccata | ttgaacantg | 480 |
| caagnttaga | gataaacaga | ggnca      |            |            |            | 505 |

<210> 128

<211> 772

<212> DNA

<213≻ Homo sapiens

### <400> 128

| gaaaaatcac | aaagaattgc | atggcaagag | tgcctgtctt | tcacagcttg | aactgttgca | 60    |
|------------|------------|------------|------------|------------|------------|-------|
| ggaactttct | ttttttttt  | tcttttgtga | tgcactccag | cctgggagac | agagcgagac | 120   |
| tgtctccaaa | acaaacaaac | aaacaaacaa | acaaaaaaac | cctgtagctt | gggatcagcc | 180   |
| ttctcttctg | ttgtttttct | ttaaaaaata | aaaattaaaa | ataggcttca | agtgatcctc | 240   |
| ccgccatgac | ctccaaaact | gctgggattg | taggtgtgag | cactgcaccc | agccgtatgt | .;300 |
| ttttttctac | ataaaaaaca | gcacaggatt | atcttccaaa | gctaacaaat | atgttcaaat | 360   |
| aaccacaacc | ccaccctgc  | tccttggagg | acaacgtgat | cactgtattc | agctctgtca | 420   |
| agaatggtcc | aggttcttca | taaattcccc | aagtttccaa | gtagttcttt | aanagcagtg | 480   |
| tgaaaacaag | actaatggga | cccttcctgg | ttgaagggaa | tgtangccaa | ttccggcttg | 540   |
| gtttaaggta | tttccctttc | caattcaatc | ccccaatttc | cccggggaag | gggtggttta | 600   |
| aacccaaaag | ttgcaaatta | agggagaata | atttgggtgg | aactggcaaa | aagttccccc | 660   |
| ctcaaatggt | tccnggccaa | nttaaaataa | gtttaaaagg | gttgattcaa | gtggattctc | 720   |
| ccaggcaant | tttcaaatcc | ggggaatggg | aaaaagcccc | ccaatggtta | ac         | 772   |

<210> 129

<211> 678

<212> DNA

<213> Homo sapiens

# <400> 129

| agagcacaga | agagggagaa | gtggctgctc | tgcgcctcac | ggccagatcc | caggtgagtg | 60    |
|------------|------------|------------|------------|------------|------------|-------|
| agtgctgatt | attggaatta | caccttgttt | cttagagtac | agatgcactc | ccttctttgt | 120   |
| gatgtggagt | ttctttatcc | actaaagccc | atctgcagag | ctgagttcta | aatctaagag | 180   |
| actagtcagg | agactaatgg | actcagaaga | aaatgttttc | tacttataac | actggatgga | 240   |
| tttcttccct | atttagtgtt | tattgtccct | caacagatag | gtaagcagca | tttccctttc | 300   |
| ttagcctcct | atgctcattt | ctgtgcttgg | taatgtgaga | aactattta  | aatataatgt | 360   |
| ggtacatacc | tcttaaaact | tgtttctcta | gaggaaacag | catgtatgtg | accttaagtg | 420 ' |
| gcaatctaag | aaagcactta | aatgctgaag | tgattgtaaa | aataataaat | actcacatag | 480   |

ttcaaagaaa tactggaaaa ggaaagccta tgaaggcgta atttaaagag ttacagttag 540 aatccaaccc tctgagatga tgaaagctaa ggtatgatca tgtctgcaac ttacttttat 600 attgttgggc cctctctcc aaaaggnaaa tatgacaaat attacnaatg tttgggctgg 660 gantacaagc atgagcca 678

<210> .130

<211> 666

<212> DNA

<213> Homo sapiens

<400> 130

gggcaaaccc tttgaaaaat attctaaatg aaaatgacat agtattcata gtggaaaaag 60 tgcctttaga aaaggaagaa acaagtcata ttgaagaact tcaatctgaa gaaactgcca 120 tatctgattt ctctactggc gaaaatgttg gaccacttgc tttaccagtt gggaaggcaa 180 ggcagttaat tggactttac accatggctc acaatcctaa tatgacccat ttgaagatta 240 atotgoctgt tactgocott coccocottt gggtaagatg tgacagttca gatoctgaag 300 gtacttgttg gctaggagct gagcttatca caacaaacaa cagcattaca ggaattgtct 360 420 tatatgtggt cagttgtaaa gctgataaaa attattctgt aaatcttgaa aacctaaaaa atttacacaa gaaaagacat cacttgtcta ctgtaacatc caaaggcttt gcccagtatg 480 agetetttaa gteetetgee ttggatgata caateacage ateacaaact gegategett 540 tggatatttc cctggagtcc tgggggatga aattcttcaa atccctccaa tctcttcaaa 600 660 ctggcaaatc cggaatattt aaaggtggga atcaagggag aancccaaaa ggggcccttt 666 tggnan

<210> 131

**<211> 753** 

<212> DNA

<213> Homo sapiens

# **<400>** 131

| gctcagcttc | tctcaccgcc | tctgggtgtc | tttgctttcc | tgaccacagc | ctctctgccc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| aagcctgtgt | cctctccttc | cgttctggtc | tccttcatct | cacgtttccc | cagcctccaa | 120 |
| gctcttgaag | agccgtgtca | cactgagagc | ttccctgacc | tggtctcatt | tccctctgac | 180 |
| agtgacctcc | agtgtgctgg | gttgaccaat | gccaagcctc | tttttaaacc | aaagtagttc | 240 |
| accatgggtt | gggatgatgt | caacaagcag | tattcatgtt | aaaaagcaat | gagggactcc | 300 |
| ttccctggtg | cacaattttc | ttcacttgtg | atctctaaac | tgttttcaaa | ttggaagact | 360 |
| gggaagcatt | gctacagccc | cagccagtct | cagccactgc | tcagcccagt | ggtggaaagc | 420 |
| tgagcacaca | gcgggtgctt | actgccccca | cttgccgtct | gctctccagt | agatcaaggg | 480 |
| acctcagaca | gggatctgag | aagtggcagg | ttccaataaa | ctgatcaaca | gaatgaagtc | 540 |
| actctgggaa | gccatgaggt | gactttacaa | gcccaagcat | gtaaatatac | acacagagga | 600 |
| taatatatat | tcttttttt  | ttttttttt  | gagacagagt | ctcgctctgt | caagccaaag | 660 |
| ctggactgca | gtggcgcaat | cacnggccat | tgcaacctcc | aactcctggg | gttcaaggca | 720 |
| ntcctcccaa | ccttaagnct | ccccgagtag | ccc        |            |            | 753 |

<210> 132

<211> 772

<212> DNA

<213≻ Homo sapiens

# <400> 132

|            |            |            |            | ,          |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| gagtaaaggt | gacttttgtt | atgttttaga | agagactggt | ggcattttgc | ctctgcccta | 60  |
| gagatttgtg | gaactttgaa | cttaagaaag | ttgatttagg | gtatctggca | gaagaaattt | 120 |
| ctaagcagca | aagcattcaa | gaggtgattt | ggatactgtt | aaaggcattt | agttttataa | 180 |
| gggaagcaga | gcataaaagt | ttggaaaatt | tgcagcatta | ctatgcgata | gacaagaaaa | 240 |
| acccattttc | tggggagaga | ttcaagccag | ctgcggaaat | ttgtgtaagt | agcaaggagc | 300 |
| ctaatgttag | tecceaagae | catggggaag | atgtctccag | accatgtcag | agaccttcac | 360 |
| cacagcccct | cctatcacag | gcccagaagg | aaaaagtggt | tttgtgggcc | tggtccaggg | 420 |
| tccccttgct | gtgtgcaacc | tagggatgtg | gcaccctgtg | tcccagctgc | tgcttcagct | 480 |

gtggctgaaa ggggccaatg tacagctcag gttgtggcct cagagggtgg aagccccaag 540 ctttggcagc gtccacatgg tgttgagcct gcaggtgcac agaagtcaaa gaattgaggt 600 ttgggaacct ctacctagat ttcagatgta tggaaatgtc tagatgccca ggcaaaagtt 660 tgctatgggg tggggccctc atagaggaacc tctgctaggg cagtgtggaa agggaaatgt 720 ggggtggagc ccccacacag agtccctact gggcactggc tatnnactgt na 772

⟨210⟩ 133

⟨211⟩ 606

<212> DNA

<213> Homo sapiens

### **<400> 133**

tttaaggcgc cgggtttccg gggctcctgg ccccgcttat tccgcggggg tcggcggggt 60 cggcctgggc gcccgcgccg ccgctgcgct ttgtccgctg ggcacactgc ttctgggagg 120 ggcgggcaga catggtggcg gccgccgccc cctcctcggc cctagcatgc cgcggccgcc 180 tcgcggctac ccggcttgcc ggtcccgagc ggcagccccg gggtggcgat ggggtcgcgc 240 cgaggcagcg gaggttctgc gggcgactgg aggttggcag tgggcgggag aaagaggaag 300 geaggegegg etgggeeteg geetetggeg eegeggtace etttgteteg geageetgae 360 420 ggccccgccg ggctctccgg agaggggaac gggcggcgag ggtggcgggt cctgggcgcc 480 ctgtgctgcg gggccgagag gcgctcgggt cgcggcggga ccggccggac cagacagggt 540 taatggaaga gcctggccag tcccgcgcgg ggcccccgca gcgacagcct tggccgnggg gactggagtc ctgaggggga gaagcctgcc gttctgaang ctcgggactt ctgncccaaa 600 606 gacttc

<210> 134

**<211> 843** 

<212> DNA

<213> Homo sapiens

### <400> 134

ttcatatttt aaccagttta gccagagttt ttagtactag tattaacttt tgaattatgt 60 ttaaggtett agaetttaca geatgtttag tttattttea tttettatta gtatttttea 120 gtacttaata gtctcttgcc cccacctcca acaagaactt tcctctctgt tcaacatcag 180 aaacattttc cttttggcat gtgctttcta gttccccaaa cagtataagc aaattggaaa 240 300 gtttagctgt cattcttgga aggttacaga tcacactagc agcctgagta atccaagagg ttttaagtat catagcattt agtttaaagt gaaatttgct ctgacagggc tggcagacca 360 420 ataggaaaaa gaaatatttg tgcttggaga agtgcatatg tagagaccaa aagtataact 480. gatggctgga agtgatttca gtctaaaaaa acaaatcatt aagagagtgc ataggggtaa aatacacagt tcatatttta aagagtctca aaatgaacca gcaactaagg ttagcattac 540 atagtaatta gttgtggtgt tcaggcttta actcactcag taccagacag tatagttaaa 600 ctgtcgctga aaaaacattg ctacttacat gatattctct agtttaaacc tatagcagta 660 720 atttttgacc ttaaaaaacc aaggtattat gacagattat ataaatgttg aaccagtaac 780 agacaaacaa ttatttaaaa ggacgtgcta atggctcaag tttattggcc ctaggggtta tttaageceg nteacaagnt eeettaacea tttggnggta tgaaatgaag catggettga 840 843 tag

<210> 135

<211> 860

<212> DNA

<213> Homo sapiens

### <400> 135

aataccatta tttaaattgc ctttgggatt agccccttcc ctttccttat aaacacaggt 60 agcaggaact gtgctgctca tttttctgtt agtagtgtgt acttcatgcc aggacattgg 120 gtattttctt taaagtgaat atagaatctc aagatatacg tagcttcatc attgacattt 180 cccagagcca atagtcagcg gatcggtctt gtgaacacca ctgccagctc ctgtgtctac 240 atctcagagg agcccatgtg ctctgcttct ctccaccaga gcaagctctg ctgggcgtgc 300 ttctgggaag aaaacaattt tctttaagaa gaagatgaat gtccaggaat ttaaagaaag 360

gategatige cittitatita tgagitteta getettgaag tiatteacat geagiteagt tagtcaagta aaattttttt tcaaataaaa gtatccaagt ggtgcagtta ttattatatc cctctttaat aattttgctt tttatttttc ccctcttctt tttctgttac ttgaatttta 540 tttcctgtaa tttatagtgt gtagctgtaa attgaaatat ttataactgt gaaattgact 600 taattcatat gttgtctcat aactttattt tttttaaatg catattcagg gaaatatatt 660 actcatattt acaattgggc gatataggaa cttcaattta gatttaattt gcaactctta 720 780 gcatttttta atccttgata aaattttccc ttttggtgtg aaacttcaaa gaaaattgnc 840 atotoototg acatttagga gcagcatott totaccoott gngaataaat cattgaagga acaggtaaaa ttaantttaa 860

⟨210⟩ 136

<211> 716

<212> DNA

<213> Homo sapiens

### <400> 136

cacttgggct cgcgtcctcg gccgcgccgc gcggcacccg ggcccagcag ccgggaggcg 60 120 gcagctctcc tctacgcccg tcccctcagg gcggctgtgg atgttgccag tattgtcgat getteagage gaegtttgee etgegaeaea ggegggeegg eteteetet tetttatttt 180 cctggaggcc gacaggagcg gggcccgagt tcggtggtgg tcgtgagcgt ggggggcact 240 caggeeegga egggetetea ggtegeegae ggeggegget ggaggeegge etggetgtee 300 caggicgicg tragcittag ggagccgatc tccgggcggc cccacagagg acgcccgcga 360 ttcgatggcg atgatgcccg ttttaaatgg tgtccctgca gccgggtgga tggatggatc 420 gtacaccttg ccttttgaga gccgggacct tacgcccgac tgcgtgttat ttctgcggaa 480 taagaacgca acctttggag gtgaagacga ctgtcggctg gattgaattg gaatcgtgtt 540 tgtgatgatg cgtttatttc tggaaatacg cggtctccgc tgcttttgct ttttgtcggc 600 agaggtttgg gttcttctct aacggtcagg ataaaggcct gtagggcgac gctgcgcgag 660 cgagaagete gneeegegn tggeeegge egeeeeett ttaggtgtgg ntggaa 716

<210> 137

<211> 868

<212> DNA

<213> Homo sapiens

<400> 137

| ccaactgttg atgcatcttg aaaatcattc | ctcaagttta | ttatcactic | cattccccat | 60  |
|----------------------------------|------------|------------|------------|-----|
| gtcagtggca tagctaatta tttagaaggc | aggtgtctct | aggtaattat | agttagttct | 120 |
| gtatgcaatt atcctttctg aaatgtgtgt | tgtatgccgt | aaaaatacct | gttacgttat | 180 |
| agaatataac aaatagctaa cacaatagtt | aatacttagt | tgatgctgac | tatatataat | 240 |
| tctctagttt attatcataa taatacacct | cacatcattg | aagtctttta | cagtttacca | 300 |
| agttctttca ttcacggtgt ttcatttggg | tatcccaaca | acattttcaa | ggcaaacgtg | 360 |
| ttaccatcct tagtttgaag aggaggaacc | tgaaacttag | gaagactaaa | taacttgtaa | 420 |
| aagatcacag aagtgatatc taatagagac | gagcttcaaa | ttcaggttta | ttgaactcag | 480 |
| aatcaatgct cctgcccct acctctcagg  | agtgataatg | gtaaagattg | ggggactgta | 540 |
| ggccaaatag gtcctctgac ctcttttata | attgtcagct | tatctaacgt | gaatgactta | 600 |
| gataggcctt gcagattgag tccttgggag | atttcctgcc | tctgtctagt | attataccca | 660 |
| gcccaatttg tacctgctga ccttccaagt | tcctgtgggc | atttgagttt | ctgacctttg | 720 |
| cctttgaata agcctgccat ttcctatagc | atatgngcat | tttttgttcc | tggaactttc | 780 |
| tactacttta aatttggtct ggatacttat | cagcaaacaa | atcttttaga | ctggcntgga | 840 |
| ngtctattat gggaaaaggg gngaaatt   |            |            |            | 868 |

<210> 138

<211> 773.

<212> DNA

<213≻ Homo sapiens

<400>\_138

ttctaatgca gcctgaactc caaagtccat gggcaggtct gtactgatgt agcttctgtg 6

gtaaatcctg catccttccg tigggatgga gggtcctcac gtagaggtig gggcctgcaa aggggcacag ggaagctgca gggacctctg tgcctaccct ccatgctgag tccattctca 180 tagccagggt gatgtgttta cagcctagat atgattcctc actaccctgt tccatggttc 240 acceccacce etggggetac gtatggeage tgaacactgg aagteetgge cagggeetgt 300 ggagtcctgt ggggcctggt tctctctggc tctgctctgc tctcttgtct tcattgcacc -360tgcagcctcg ctgatctcct tgccgttctg cagatgttga atcccttcag tgtcagggct 420 gtgtgcctgt ggttctttct ctctgcctgg gacatcttgt ctccagctgt ctgtagggct 480 ctttctctca cctccttcag gtctcccact ctgtgagcct tctctcacca ttctgtccaa 540 600 aatagcagcc ctagctctac ccctttgttg cattctgtcc ttatccggga tggcattcat tgctacctga caccatectg catagetact tgtctgttga tttgttgtct gactectcaa 660 720 ttagaactaa agtgctgtgc agggtgggag tggagtgtac ccatcgncag cccctgggca 773 agcacctgct cactgnctgg ctcaaatgca agtnccgaaa agtcttccac tta

<210> 139

<211> 710

<212> DNA

<213> Homo sapiens

### <400> 139

ggtttccttg cccgtacttt taacttacct tattttcccc aaaacggtgg ctggcgttga 60. gacteceggg ageatgteca ggtteeeegg cettagggte tteeeaggea ettgttetge 120 ttgtcccttg ccttcccca cctgtgaggc ccagcttcgg catcgtacgg ggtggttctg 180 240 ggccgggtgg cgcatcaggg tcccccagtg cctgtgacca ggcccgcccg ccccatctta cagcaccact gccgggcgtg tgggcagata ttctgtggaa agtgttcttc caagtactcc 300 accateceea agtttggeat egagaaggag gtgegegtgt gtgageeetg etaegageag 360 ctgaacaggt gagtccccgc ccccatttg ggctgcaggt ggggcaggct ctccaggctg 420 480 ggttttctgt ccctcttggc catggtgcct gaggcctgca gaccccagag gaccctcaca 540 gcacagcagc tggaaggtca agggaaaccc agggtggccg catgccctcg gaccctgccc cacactaggg caggtgggtg tgagagacag ggcgccgcgg ctccagggac cgaggctgcc 600

| cgacaaacct | gttgcttggg | tttgggtttg | ggtttggttg | catttcaact | ttcggaataa | 660 |
|------------|------------|------------|------------|------------|------------|-----|
| aacttacaga | aaagttgcaa | gagtancaca | gagaaacttc | ggggccnngg |            | 710 |

<210> 140

<211> 790

<212> DNA

<213> Homo sapiens

# <400> 140

| ctagaggcag | gcagagggaa | gagaaagggt | ctgttgtttt | tctctcctgt | ttctcgctcc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ctctctgctg | atcacaaagc | tgctgaccgg | gtcagaaagt | cctgatggaa | atccaccagc | 120 |
| gctgggcagg | ccctcctcc  | tccagggagc | ttgtccttgc | ctaatttttc | ttcgtcctga | 180 |
| tgagaacaaa | aaagagagag | agaagaaaag | aaaaaccaca | aacttccttt | gaaaaccagc | 240 |
| ttgtagtcag | ggcccggagc | gcatgccata | gactcggcga | ctcaggaatc | ctgaagactc | 300 |
| tctgagcgac | ctggagcacc | ttggctgtgt | ccctgcctgc | cttcaccctc | ctccagtgcc | 360 |
| cccagtactg | ggcgtgagtc | cggaagtggc | cacaacccag | cctggaccgt | cgcttataaa | 420 |
| gctgtgtaaa | cctgtataag | ctcaggcgtt | gacagctgga | aggcagctgg | cactggcagc | 480 |
| cccttcatt  | gcacctatct | ccccatctc  | attgccacgg | ctgaaccctc | cttctcaatc | 540 |
| ttggaacagc | accccttct  | ttaaggtaaa | aactttattt | taatcatctt | cttcacctct | 600 |
| tctcccaccc | ttctctattt | cctctccagc | tttggggagc | tgacacctgc | tgnccttnca | 660 |
| cctttggtct | gcaagtctgg | attgcttaaa | ggagctaagt | caggagagac | atgtaaaggg | 720 |
| gatgctgctt | ggtccttctc | ctttaatgaa | agcccgaaac | ctttcccctt | ttccttgnga | 780 |
| gcaagtntnc |            | <i>:</i> . |            |            | •          | 790 |

<210> 141

<211≥ 814

<212> DNA

<213> Homo sapiens

# <400> 141

| ttttttagat | gaagtttcac | tcttgttgcc | caggctagag | tgcaatggca | caatctcagc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tcactgcaac | ctctgcctcc | cgggttccag | cgattctctt | gctttagctt | cccaagcagc | 120 |
| tgagattaca | ggcatgagcc | accatgcccg | actaattttg | tatttttggc | agagacaggg | 180 |
| tttcaccatg | ttggccaggc | tgatcatgaa | ctccttacct | cagatgatcc | acccactcga | 240 |
| cttcccaaag | tgctgggatt | acaggcgtaa | gccactgtgc | ccagcccatg | aaactattta | 300 |
| aacaacatgt | gattacttgg | ccacttttct | attcaaaaat | atggtttatt | agtcctgatt | 360 |
| atgtgccctt | cttggcagac | agaatgatac | tgtgtacttc | tgctgaaaga | aatagaaact | 420 |
| ctcttccatt | ttctagataa | gagagtccta | aaacagaatt | tccaaaaact | ccagttagtg | 480 |
| gaggtaactt | aaaatcctct | ttaagaagga | taattatctt | taaaggttga | ttcccaccct | 540 |
| ccctcccag  | ttacttaagg | aactaagtga | gtacatctcc | agttgcccat | gaaagcataa | 600 |
| gtttgttttc | ctcagctgag | gcaagtggta | gagtatacag | gataacgaag | taacatgtaa | 660 |
| aaggcaggac | gcacataaag | gtgacatggc | tattggttca | cctggagaaa | ccacatgatt | 720 |
| gggacctgaa | ggttactgac | tgctacaggg | gctgattgtg | aacacganga | acccatgtg  | 780 |
| tgtgganctg | tanggtgaga | gcccccatt  | ttta       | •          |            | 814 |

<210> 142

**<211> 727** 

<212> DNA

<213≻ Homo sapiens

## <400> 142

| agctgagagç' | ccaatcgcat  | caggggagca | cggcccagca | gcaggagctc | caggctggct | 60   |
|-------------|-------------|------------|------------|------------|------------|------|
| ggacacctgg  | gtccccacgc  | agactgtgag | tagagggagc | tggaccacag | tgggacaagg | 120  |
| acacctccag  | acaggttgcc  | agggccccac | atggaggagg | caggtgggcc | catggcccgg | 180  |
| gccaaggccc  | aagtggtaag  | tgccacattg | acatggcggc | agtggccccc | cacccaggaa | 240  |
| gagatcaaac  | atggttttca  | caaggtgtcc | ctggtgtcag | gggcccagat | ggaagccccg | 300. |
| cagaaggaga  | 'tgtttgagtt | cagccgtcga | gaggaagtgg | aagtcaatgg | ctttgcaaca | 360  |
| caggaagaag  | agactgtgaa  | ttgccagggc | cctcgggata | cagctggctc | caagaacttc | 420  |

| ataacaa    |            |            |            | ,          | •          | 727 |
|------------|------------|------------|------------|------------|------------|-----|
| aataccgagt | gacacgcact | gtgcggacca | ccacatggtn | ggaggtatgt | tgaccggcgg | 720 |
| gagagccaag | tccccaccca | ggtgtaggtc | tcaccagtgg | tagcttccgg | agcctnnagg | 660 |
| gagcccccat | gtgtgggagc | tatggccagg | actgagcttt | tggttcccct | gctgggcccc | 600 |
| gaggggaggc | tgaaggaggc | tgtggaccag | agtgatggca | gccgccaagc | tcccaggact | 540 |
| cagagccatg | gacccatctt | ttccaagaag | tacataccac | ctcccaagga | gaaaaggcct | 480 |

<210> 143

<211> 661

<212> DNA

<213> Homo sapiens

<400> 143

|   | gttacggcca | ccactgctgt | gtataaggac | cactggcgta | cggaggcttc | tgcctctccc | 60  |
|---|------------|------------|------------|------------|------------|------------|-----|
|   | actgaccaca | gtggctacgg | cacgggccac | taccccgag  | gcgccctccc | cgcccaccac | 120 |
|   | ggcggctgtc | ttggacaccg | aggccccaac | acccaggctg | gtcagcacag | ctacctcccg | 180 |
|   | gccaagagcc | cttcccaggc | cggccaccac | ccaggagcct | gacatccctg | agaggagcac | 240 |
| • | cctgcccctg | gggaccactg | cccctggacc | cacagaggtg | gctcagaccc | caactccaga | 300 |
|   | gaccttcctg | accacaatcc | gggatgagcc | agaggttccg | gtgagtgggg | ggcccagtgg | 360 |
|   | agacttcgag | ctgccagaag | aagagaccac | acaaccagac | atagccaatg | aggtggtagc | 420 |
| • | tgtgggaggg | gctgcggcca | aggcatcatc | tccacctggg | acactgccca | agggtgcccg | 480 |
|   | cccgggccct | ggcctnctgg | acaatgccat | cgactcgggc | agctcagctg | ctcagctgcc | 540 |
|   | tcagaagagt | atcctggagc | ggaaggaggt | gctcgtagct | gtgattgtgg | cggggtggtg | 600 |
|   | ggcgccctnc | ttgctgnctt | ttggtcacac | tgntcatcta | tcgtatgaag | aaaaaggatg | 66Ò |
|   | a          |            |            | •          | •          |            | 661 |

**<210>** 144

<211>. 775

<212> DNA

### <213> Homo sapiens

### <400> 144

agcattagtt tttgtttttt atctgacagg tagctatgga tattctgagg gagaagccag gattaataca cattttttt ttaagttgct gaattgtagt ggctctcctt tctagcattt 120 ttgtcactat tgagccctct tagtttatgc tagacgtgtt tttcttattg gttgatattt 180 taaattatta aagccatctt ctgaataagc tttattcgca ctttgtacct agtttctcca 240 300 teagaaggat ctattgetat accattgtat acattttete attggtette gggttacttt 360 cagagtgtaa agactcctta tgccacaaaa ttaagcttag atttccccca aatcaaatac tataaatcag attecttagt etageeacaa ttgacatate ttggagtgga taaatetttg 420 480 ttgctggcat tgttctgtgc atcataactt gtttagtggc atgtcatcac tgtcttctac tctctagatg ccattagtat actcttcaca gttaggacaa ccaaaagtgt ctccagatat 540 tgccaaatgt ctcctgatgg gcaaagtcta tcccagttgc gaaccattat tgtaaattaa 600 acttggtttc aaatttgagc tttattcctt agctctggga acttgggcaa gttacttccc 660 ttcgagcctc aatggcctca tttgtaaaat gacattaata cctactttta gctgtgggaa atgagtacca tgattatnen ageagttgga tgggetggta catganagte aaagg 775

**<210> 145** 

<211> 670

<212> DNA

<213> Homo sapiens

#### <400> 145

atattetatt ettttttee eteegeaag agggggtete aetetgttge etagtetgga 60 gtgcagtggt gegateatgg ettactgtag ecateatage tgaettgaga eategaeete 120 eetggeteaa gtaatettee eaetteagte teetgaatag eegggaeeae atgageeaee 180 aageetgtet aaetttttaa ttttttgeag agatggggte teeetatgtt geteaggett 240 gtetgaaaet eetggeetea ageaateete etgeeteggt eteecaaagt gttgagatta 300 eagatgtgag eeaacatgee eaaceatgtt etgttettat atgaateeag gteaaaaaga 360

ttaagaacct aggattatca tagacatcc ttctactttg aatattcttc taagtttgtg 420 attatatgct atgtataatc ttagacaatc ttctaaacaa tgattgaaaa gaattataat 480 gataggcaca tgaaaaagca atgccttggc ccggcacagt ggcccacacc tgtaatccca 540 gcactttggg agaccgaggt aggcagatcg cttgagccca ggaatgtgag gccagtgtga 600 aacctgggca tggcaagaca ccatctntac aaaaagtcaa aaattggcca ggcgtggngg 660 cncatgcttg

<210> 146

<211> 841

<212> DNA

<213> Homo sapiens

### <400> 146

caagttatgc cctgacctgg aaattcccca gagttgctaa aagaactgaa tgggggatac 60 tgtacataag agcacttaag caacttaaaa tgtcacatgt agggacatat gcgtgtcatg 120 tgaatagcag ctgcattttg aagttgcaat aagtgtgagg aaaatgtgct tgttagctca 180 gctctagaca gatccatgga tagaaagaca tagacatgga tccccatcca gctaagtatt tgcaatccgc aggtgaagcc tggaaaccca gagaaatgga cctgttccat ccgtgacaga 300 agegetecea ggacetaaat taaagggatg ttagaatgtt ttgagaatet tggcagggee 360 attaggtagt gtttgtagct tttggatgct tttggtggag ggaaaatgag atgggctcac 420 ttgggaggtc tgcctgcagt ttccatccaa atttctaatc aacgttgtgg ttttatcatc catttccgga atcattaccc cttaaaatgt gaggaaaacg actctccttt tcttcaactc 540 cccatctttt ccaaataccg ctgcgagttt ttgttgccaa cagcttttcc caatgtgcgt 600 gtacttacca acgtecagae tectecetee categgecag cettgettgg tetagetatt 660 attcaaaggg gaacatgcgt gagatatcac tttggttttg ccatctaatg gattccaccc 720 cccaaagtnt ctgactttgc acttaggctc atctgcanga ccccnagggt ggcttccctt 780 cccttccgtg gctggcttaa aggggttaat tgaatccatt ctcttttcct tttccgggnt 841

<210> 147
<211> 764
<212> DNA

<213> Homo sapiens

### <400> 147

cccgtcata ggacttgtga cttactacca tcatacatat ttgattcaat tattatttat 60 tgettaaatt gitatgatea titattataa ateatgiatt aeggetaatt aacatacata 120 tgctcagtca tttacttgat tagttattag cctcaattat attattttt aatatatat 180 tttatttgac aaatagaaag tatatagatt ggtacaatat gatgtttgga aataagcata 240 tattgtggaa tgactaaatc aagctaagta acttatgcag taccttacat gcttatcttt 300 tgttgtgata agaacacttg aaatctattc tactgtctta gaaatttaaa aatgggcaaa 360 ggacttgaat agacatttct tcaaaaaaaa atgcaaatga ccaacaggta tatgaaaagg 420 tgctcaacat cactaattat cagagaaatg caaatcaaaa ccacaatgat atatcaccta 480 acacctgtta agatgtctat tagaaaaaca aaatgtaaca agtgttgata aggatatgga gaaatagaaa tettigigig eetigiacae igitgeaaga geattagiag aactaetiig gaaaactett tgnaattate tactaaagat gaatatatge etaetatatg acceagtggt: totactttga agtgatcagg caacagaagt acatgcatac atgcccaaaa gacatatccn gaaatggtat tagacntctg ggttcaggtn cacatgtagg gagc 764

<210> 148

**<211> 873** 

<212> DNA

<213> Homo sapiens

### <400> 148

aataataaaa ttatgtetaa tgaaatteea aattaaggea aaataaacaa cagaagaatg 60 acageaaace aaactagtgt actggtate actateaata attaacagag gtetggaagt 120 ttgaaatget acaagtttta actgtataca gttgataata ttgetttett taggaateaa 180

ctgaaaacat actaaaatta attggtatga ctaagagagc agaaataaga ctaaaaataa 240 aaacacaatg gatttcttct atgtaaagag cactcagaga ctatgatgaa aatattacat 300 accaatgaca gtagaagtag aaaaaaacac caaaataata gtgtgaaaag tttaattgga 360 attettaaca agaacatgta agatttteat gactaaattt tatataaata aaaacttgta 420 taaataagtt gtgacacaat tttctgaatg agaaaagaga gatgaaatat tgtctttcta 480 tttgcatata gatttactat caatctgaaa gtcttaactg aatctttctt ggatcgtcac 540 aaaaatatac aaaaaaaact catcttaaaa taaaaatcag ctaagaacta gtggaacagc 600 aagtttagta attttcctac caaattttaa tgtcatttta aagccctact aaatatttta 660 atattttata tattgctata atagaacaaa ttgtatatag catgcttcct gaattggata 720 780 gattttaata teatgagagt agatagatat aetaacagaa ataaatteat ttaetnataa tgcttggcat ataaaaacca tactttgggg ggatagaata ggagcatgaa aatttgggct .840 aatneattte ettetaaatt aetggaaaat ggn 873

<210> 149

<211> 850

<212> DNA

<213> Homo sapiens

### <400> 149

aacaatgctc attgaagctg caaagggtgg ccatactaat gtagtttctt atctgttgga 60 ttatccaaat aatgttctgt cagttcccac cacagatgtg tctcagctcc ctccaccttc 120 tcaagatcag tctcaggtgc cacgtgtgcc aacgcataca cttgccatgg ttgtacctcc 180 240 ccaggaacct gacagaactt cacaggagaa ctctcctgcc cttttaggag tgcaaaaagg tacatccaag cagaagtcca gttccctcca ggtagcagat caggacctac tgccatcttt 300 tcacccatac cagcctttgg agtgcatagt agaggagact gaaggcaagc tgaatgaact 360 gggacaaaga attagtgcta ttgaaaaagc acagcttaag tcactggagt taattcaagg 420 tgaacctctg aacaaagata agatagaaga acttaaaaag aacagagaag agcaagtcca 480 gaagaagaag aaaatattga aagaactgca gaaagtggaa aggcagttgc agatgaaaac 540 acagcagcaa tttaccaaag aatacttgga aaccaaaggt cagaaagaca cagtgtctct 600

acaccaacag tgctctcata gaggagtctt cccagaaggg gaaggagatg gtagtctcc 660
agaggatcac ttttcagagt tacctcaggt tgacacaatc ttatttaaag ataatgatgt 720
tgatgatgag caacagtctt caccatcggc agaacagatt gattttggcc cagtccagcc 780
tttatcatct tccacagngt aactttttcc agtgacttag gntctaatgg gacaaantct 840
ttttgacttt

**<210> 150** 

⟨211⟩ 739

<212> DNA

<213> Homo sapiens

#### **<400>** 150

ggaaaaaaag ttaaggatac agttgaccgt tcgataatgt agcccactgt tgaccagaag ccctacccac aacataaaca ggcaataaca catattttgt atgtgtatta tatagtatat tcttaacaat aaagtaaact agagaaaaga acatgtacca agaaaatcat aaggaagaga aaacacattt acagtactgt actgtattta ttggtaccat acatttatgt tgctgtttac 240 aagatgaagc atctgtctga aatggccagc agctacagct gtacctatct actgtacata 300 tcaagcaagt cgctttattc ttataatgtc tatgacttct ttctttgaaa gcgcttccat 360 catcactgtt ggcacttcat atgggtctca tggtgttaag gtttacggca ttgcactaga 420 cacaatgaaa actacacaag agggccgggc acggtggctc acgcctgtaa tcccagcact 480. ttgggaggcc gaggcgggcg gatcatgagg tcaggagatt gagaccatcc tggctaacac 540 agtgaaaccc tgtctctatt aaaaataaaa aaattagcca ggcatggtgg cacgtgcctg 600 taatcccage taatcgggag getgaggcag gagaatcget ttttcccaga aggegtaggt tgcagtgagc cgagatcgtg ccactgcact ccagcctgga tgatagaggg agactctgtc gcaaaaaaaa aaannngaa 739

<210> 151

**<211>** 783

<212> DNA

# <213> Homo sapiens

# **<400>** 151

| gaanactcac | agataaagtt | atagttattt | cagggttctg | aaaagacgca        | gaacatgaag | 60  |
|------------|------------|------------|------------|-------------------|------------|-----|
| ggactcagaa | gtctggcagc | aacaaccttg | gctcttttcc | tggtgtttgt        | tttcctggga | 120 |
| aactccagct | gcgctccgca | gagactgttg | gagagaagga | actggactcc        | tcaagctatg | 180 |
| ctctacctga | aaggggcaca | gggtcgccgc | ttcatctccg | accagagccg        | gagaaaggac | 240 |
| ctctccgacc | ggccactgcc | ggaaagacga | agcccaaatc | cccaactact        | aactattccg | 300 |
| gaggcagcaa | ccatcttact | ggcgtccctt | cagaaatcac | cagaagatga        | agaaaaaaac | 360 |
| tttgatcaaa | ccagattcct | ggaagacagt | ctgcttaact | ggtgaaaata        | tactggatta | 420 |
| tgtttaatta | tggttctatt | ctctttgaaa | acatgaacca | tgtgaataaa        | acctttggac | 480 |
| ccttttattc | catttgtaat | cttaagaaca | cacacagata | gttttattct        | ttcagaaaca | 540 |
| gaatatatat | aggatgctta | gctgagaaca | tcatcttctt | tcattgcttc        | aggtcctgtt | 600 |
| tagatgacca | aaaatgtttt | cagatcacct | tgtgtcttac | tcttgagttt        | cttagaatat | 660 |
| ttataattat | aaggctgaag | actaaagtgn | tctttccttt | taactatagc        | cagtacctgg | 720 |
| cttgatctta | ntggggnttt | tttttttca  | ttttggtacc | cacttgcatt        | ttggtttcac | 780 |
| tta        |            |            |            | was in the second |            | 783 |

<210> 152

<211> 777

<212> DNA

<213≻ Homo sapiens

## <400> 152

| ctgcacgtcg | cggacaacac | cttcgtcttc | ttcacgtcgg | acaacggcgc | tgccctcatt | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tccgcccccg | aacaaggtgg | cagcaacggc | ccctttctgt | gtgggaagca | gaccacgttt | 120 |
| gaaggaggga | tgagggagcc | tgccccgca  | tggtggccag | ggcacgtcac | tgcaggccag | 180 |
| gtgagccacc | agctgggcag | catcatggac | ctcttcacca | ccagcctggc | ccttgcgggc | 240 |
| ctgacgccgc | ccagcgacag | ggccattgat | ggcctcaacc | tcctccccac | cctcctgcag | 300 |

ggccggctga tggacagcc tatcttctat taccgtggcg acacgctgat ggcggccacc 360 ctcgggcagc acaaggctca cttctggacc tggaccaact cctgggagaa cttcagacag 420 ggcattgatt tctgccctgg gcagaacgtt tcaggggtca caactcacaa tctggaagac 480 cacacgaagc tgcccctgat cttccacctg ggacgggacc caggggagag gttccccctc 540 agctttgcca gcgccgagta ccaggàggcc ctcagcagga tcacctcggt cgtccagcag 600 caccaggagg ccttggtccc cgcgcagccc cagctcaacg tgtgcaactg ggcggtcatg 660 aactgggcac cttccggctt gtgaaaagtt anggaagtgt ctgacacctt ccggaaatnc 720 attcccaaga agtgcctctg gtccactaa cacctgggca aactcaggcc angccta 777

<210> 153

<211> 691

<212> DNA

<213> Homo sapiens

### <400> 153

tctacatttt tgaaagacaa gaattaagtt tgattgagaa agatgttttt aaaactttga 60 aactcataat tgctctgttt ttgctgttgt tagtggcata agaagggact ggctgtgtta ttctgcatat tgcagttctt gtcaatgacc tggtaagtct ttccttaccc tagtgaagtg 180 ttaaaattgc ctgagatgtg acgagcattt tgtttgggac ctgtgaagcc ctagcatttc 240 300 gteetgttge acttgacage gtggeteagt ggtactgtte gggagaagta tggggtgetg 360 tgctcgtaga gttacatagt gatatgttct gcttttttct aatgtgagaa agagaaataa 420 taagaaaagt aggtgatgcc atgtgagtac ataaaagtga gaccaaatca cagggtgagt 480 ccaagggaag atgagtttac ctgcattctc cactctattg ctggataaat acaacgtgga 540 atttatcctg atgttgactc tgtggccctg tgatatctgg agatgtcttc tgaattggca 600 gngattaaat acttettaag ttactggttg agcatecaaa teccaaatge tteaggatee 660 691 caaaactttt ttttttttt tttgaggcnn a

<210> 154

<211> 740

<212> DNA

<213> Homo sapiens

### <400> 154

|   | tttcagaata | ctgtataaaa | ttaaatagaa | tattgtaata | gtttaaggtt | ttgcatatat | 60  |
|---|------------|------------|------------|------------|------------|------------|-----|
|   | tgggttaaat | atttetgaaa | agcaaaatta | tttcaagttt | tcaaatatct | tgacatggaa | 120 |
|   | cactgccttt | gctaggagtc | atttctagaa | attacttaaa | ataggagaca | agcatcaatc | 180 |
|   | atagggattt | cagctttaga | actattggaa | caaatctagg | ttagacaacc | agcttatatt | 240 |
|   | attaagcaag | attacatata | ataatcatct | tttttaaag  | gagagacttt | tgcaaatatt | 300 |
|   | atacagcaat | caaaaggtct | tagcttagtg | tatcatcctt | attagaaacc | aagatgttgc | 360 |
|   | attttatttc | agtgctttct | gtagtcatag | ctaactcttt | tacctcagca | atttcaatca | 420 |
|   | aaaagcttct | ctatcattct | atacataaaa | tgcagacaca | ttagcagtca | acattatgaa | 480 |
| • | tgcctttaca | ggtaaacaaa | caaaatcact | ttattactgg | attttataac | caattcccat | 540 |
|   | tcttttttgt | gactattcag | gagaatactg | ggttgaccct | aaccaaggat | gcaaattgga | 600 |
|   | tgctatcaag | gtattctgta | atatggaaac | tggggaaaca | tgcataagtg | ccaatccttt | 660 |
|   | gaatggtcca | cggaaacact | ggtggacaga | ntctagtgct | gagaagaaac | cccgtttggn | 720 |
|   | ttgganagtc | catgggatgg |            |            |            |            | 740 |

<210> 155

**<211> 761** 

<212> DNA

<213> Homo sapiens

### <400> 155.

gaggatgca ggaggagtgc ttgcatgttg agcagtcctg agagtagctt gacaccacct 60 ctctcaacca acctgcatct agaaagtgaa ttggatgcat tggcaagcct ggaaaaccat 120 gtgaaaactg aacctgcaga tatgaatgaa agctgcaaac agtcagggct cagcagcctt 180 gttaatggaa agtccccaat tcgaagcctc atgcacaggt cggcaaggat tggaggagat 240

ggcaacaata aagatgatga cccaaatgaa gactggtgtg ctgtctgcca aaacggagga 300 gatetettgt getgegaaaa atgteeaaag gtettteate taaettgtea tgtteeaaca 360 ctacttagct ttccaaggta ccagtgaaat aattgatttt tggtgttgat tttcataagc 420 taaaaataaa taacagaaga atgttcaggg cagatggcct tctaaccagt gcatagtatt 480 tctataaaac agggagcctg ttattctttt ggtattagct tccagagaaa ctaacaataa 540 aatatctaag atctaagtag tacattaatg ttaaagagta gatttcatct cctggccttt 600 agtttatatt cagtataagg aaaatagata aaactctaaa ttaatagggg gctaaggtta 660 720 caaaacctgc agtctggttc taattctgta gtaagcttga caattcacta attatcaggg atcagttttt gcatctacaa gtggtanggt ttggnttanc a 761

<210> 156

**<211> 737** 

<212> DNA

<213> Homo sapiens

### <400> 156

agtotgggto tggagootga gocotgogga acotoggogo toggococac coogcoogta cctgcactta tttattgttg ttatttctta ccgcggagcc ccgcagtcgg gtcctcccgc 120 ccgctccgc gcagcgctag cattctccag tccctcagtc ccttcccgcg cggtgcgccg 180 cagcegagge gatgegeete atteagaaca tgtgeaceat egeeggagtae eeeggeegg 240 gcaacgccgc ggcctccgac tgctgtgtgg gcgccgccgg ccgccgcctg gtcaagatcg 300 ccgtggtggg cgccagcggc gtgggcaaga ccggtgagtc gtcgcgctta gccctgggtc 360 tggtcttgga cgacccctga cgggagttga ggctgaacaa ggcgtgggga gcggtgggag 420 ctgcagcccg accgctctcc gtccccgcgc agggagccgc tgccccttgg gagtgggctt 480 agccgttgtc tacgccaccc gcctgcttcc acagacgggg gaaacaagga tcaagaatgg 540 ccaggcaget ttetggggae caceggeace gnegecatea gaactttggg gtgtttgage 600 660 ctctggcaat gcctggcaca gaaaggggag ttagtgaagc tagcccccct gggaggtctt 720 gaaggttagg aagacatggg totactggaa ggottangtg tggnttaanc cgggottaaa 737 aggaagggt gggccca

<210> 157
<211> 680
<212> DNA
<213> Homo sapiens

### <400> 157

gacaccetet cegegatgae tgtgagtggt ceagggacee eegageeeeg geeggeeaee cccggggcca gctcagtgga gcagctgcgg aaggagggca atgagctgtt caaatgtgga 120 gactacgggg gcgccctggc ggcctacact caggccctgg gtctggacgc gacgccccag 180 gaccaggeeg ttetgeaceg gaacegggee geetgeeace teaagetgga agattaegae 240 300 aaagcagaaa cagaggcatc caaaggtagg ggaatggtgg gccctggtgt ggagctgtag ggcttctgtg gtgggcaagg actctgggac cgctgcaccg tcacattctc ctcctttggc 360 cccagagaca catctgcctt ctttctttcc cactgcctcg ggcctttcct tttctgcagc 420 tacceteace ttttctgagg ctgaagcace gageeceaca ttegteece ceaeettett 480 etggeettte etegagatet tteectaetg etettgeetg gagacagtgg ceteatgggt 540 gctgacagcg ctcctgtttg tgctcagcca ttgaaaagga tggtggggat gtcaaagcac 600 tctaccggcg gagccaagcc ctaganaact gggccgnctg gccaagctgt cttgacctgc 660 680 anagatgtgt gagctttgga

<210> 158

<211> 765

<212> DNA

<213> Homo sapiens

### <400> 158

agaggagac ccgcggcaac cccggcaacc cagggctcgg cgtcgctgcc accatgacgg 60 gaagcaatat gtcggacgcc ttggccaacg ccgtgtgcca gcgctgccag gcccgcttct 120 ccccgccga gcgcattgtc aacagcaatg gggagctgta ccatgagcac tgcttcgtgt 180

gtgcccagtg cttccggccc ttccccgagg ggctcttcta tgagtttgaa ggccggaagt 240 actgcgaaca cgacttccaa atgctgtttg ctccgtgctg tggatcctgc ggtgagttca 300 tcattggccg cgtcatcaag gccaagtgtg agaagccatt cctggggcac cggcactatg 360 agaagaaggg cctggcctac tgcgagactc actacaacca gctcttcggg gacgtctgct 420 480 acaactgcag ccatgtgatt gaaggcgatg tggtgtcggc cctcaacaag gcctggtgtg 540 tgagctgctt ctcctgctcc acctgcaaca gcaagctcac cctgaagaac aagtttgtgg agttegacat gaageeegtg tgtaagaggt getaegagaa gtteeegetg gagetgaaga 600 ageggetgaa gaagetgteg gagetgaeet eeegcaagge ceageceaag geeacagaee 660 720 tcaactctgc tgaagccctc ttgcgcagct gcctctcggc cccttcgctt ctncccttcc gnttgtccat gcttggcccc ctcgtcccca tncacctgtg ccctt 765

<210> 159

**<211> 879** 

<212> DNA

<213> Homo sapiens

#### **<400> 159**

gtattcatta aaagaaaact aactggaaaa caggttagat taattcagta ctattaaaaa 60 gctgagatct aaggtgaagt ctataaagat taaagttccc ttttttctga tgttcaagtt 180 gattgttgtt cagtatggca tatatgacaa aagtatattt gagtcaaatg tggctttcta 240 aaatggatgc aacatgtaga tccatacaag ttggggtagg atatacccaa gcgtgtatat 300 atttgctcag catgtgaaat aataaaaata atacaaaact actcattctt caaggtagtt 360 acagtttcaa tgccactctt cctgtcccca tattcattaa gacagaagct tgatgcttaa 420 acacactg gtatgaaaat gttttgtgtt ttctgttata ttgtcagaag tgacattgat 480 ttgaaaggat gagagcctta ttttcttgca acccttactg aaaggcatga tttcaggtga 540 600 aaatetteag tgatttttaa catatgteac atgtttgeag taaggteagt ettteeaate acagatagag ttatgcatct atattctacc aaatattagc aaaaccaatg caatacgtgt 660. ctggctttgc aatataaagt aagcttggtg attatattta agtggagtta cttgaaatan

gtcatttagt ttacatacag tttaattctc atgccacaat taataaggna tcacatgact 780 gcaaaatccc tgcancaaac ttctagctct gatattggta agatacttgg ctgaagtgga 840 nataactggc tgtgctgcac ttaagctgtc tgaggtgng 879

<210> 160

<211> 779 .

<212> DNA

<213> Homo sapiens

### <400> 160

| ttccaggtgg | catttgttag | ctggtagaca | aggactttgc | cgtgaatttg | ttagtagcaa | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ggaatgattt | cttccagctt | ccttgaaatg | aataattagt | aaacttctaa | gcaaagtcaa | 120 |
| tgactaggag | tttcacatgt | ttgtgaggtc | ctaactaatt | ctcttaccca | gatgccacct | 180 |
| ccatgaatga | tggtgcttta | ggcttctgga | atatgtaaaa | acagcaaagg | gaaccaagtc | 240 |
| tagactgcat | actggtaaac | cagggaagac | tcagaactgc | atatgcatcc | tcatgcattc | 300 |
| ctttgtaaag | accaccagta | ctaaaataac | tggacactca | ttgtacctcc | cagcgataag | 360 |
| tatgtgtaac | aggccagtgt | gttgtcccca | tgatcatgaa | ttaggcttgg | gatgcttcca | 420 |
| aatatattca | aggtgttgga | acaggatagg | cagctgtgac | tccctcaaga | gtccttagaa | 480 |
| ttctaaataa | aatgcagagc | catcctaaga | cacaggggta | tggacaaggc | ctggtgacac | 540 |
| caaaggtgct | tgtatccaat | tgaaaaggtg | cctgtctcaa | tttcatacca | cctttattgc | 600 |
| agttaaaaaa | aaatcacact | ctggggacac | ttggtggaat | tacagagcca | ccatcatcat | 660 |
| tccaaccact | atttcatttt | ctgnagtttt | acctgtgtgc | aattactccc | cctncattct | 720 |
| ggtccacttc | ttacttctta | gtaccaaatc | ctctggttgg | gattgagcgc | tgntcctgg  | 779 |

<210> 161

<211> 691

<212> DNA

<213> Homo sapiens

## <400> 161

tcttgaactc ctgacctcaa gtgatccacc caccttggcc tcccaaagtg ctggaattac aggtgtgagc caccgtgccc agccaaaatt cttaaagaat aaaccaaatc ttaaacaatc 120 ttccaattag aattattttc agccaaatta tcatttaagt gtgagagtaa aataaagaca 180 ttttcttttt tcctttctct ttttttttt ttttttgaga tggagtctcg ctctgtcgcc 240 caggctagag tgcagtggtg caatctcggc tcactgcaag ctctgcctca ggggttcatg 300 ccatteteca geeteageet eccaagtage egggaetaca ggegeeeace accatgeetg 360 actaattttt tttctatttt tagtagagac agggtttcac cgtgttagcc aggatggtct 420 caateteetg acctegtgat etgeetgeet eggeeteeca aagtgttagg attacaggtg 480 tgagccaccg cgcccggccg ataatgtgtt gttttaaggc attaattttg tggtacatac 540 aaaagtaatt tgtgtgtaca tacatgcata tatacntata tatgtacaca cacatatatt 600 tggtaaacct acacacagtg tttattttat tatttcgáta aaactattat tcacagctga 660 gccttgnggt gcactggaat agnncttttc g 691

<210> 162

<211> 661

<212> DNA

<213> Homo sapiens

#### <400> 162

ctgttggttg attgaaaatt ctctttcatt gtcaactgaa cgctggactg ccagacagtc 60 ccaaatggcc tccctgaaat gcctgactgt tggtgccact tgccatctgg gagatcagct 120 ggagcttttg agcaggactt catttgtcct tcctcttggc ttctcctcat cactacttgg 180 cettecteae agactgatgg ctaccateea acaaaggaeg ttecaatggg tgetgaaaag 240 ctgtgtaact cttaagaccc agacctcaaa gttacacagt gttacatttt tccaataaaa 300 caattaaata aaaaaattaa ttttatggat acataatagt tgtgcctttt atgcgataca 360 tgtgataaat tctatttaga tattttaccc atttttaatc agatctattt gctattgagt 420 tgtttgagtt ccttatatat tttgattatg aatcttttgt caggtgaaga gtttgcaaat -480 attttctccc attttataga ttgnttcctc actttggtaa ttgtcactct tacaagattc

aatttgttga gtttgtgaga tgagattata gtcaaatagg taaatctacc tnctgntaac 600 tactcaataa tataatttat ttattcaaaa aatggtaatt gctgggntga agatatagat 660 661

<210> 163

⟨211⟩ 741

<212> DNA

<213> Homo sapiens

<400> 163

gaataaaatg tacaaatttg ttgtgttttt ttatgttcta ataatactga gacttctagg tettaggtta atttttagga agatettgea tgecateagg agtaaatttt attgtggtte 120 ttaatctgaa gttttcaagc tctgaaattc ataatccgca gtgtcagatt acgtagagga agatettaca acattecatg teaaatetgt taccatttat tggcatttag ttttcattta agaattgaac ataattattt ttattgtagc tatatagcat gtcagattaa atcatttaca acaaaagggg tgtgaaccta agactattta aatgtcttat gagaaaattt cataaagcca 360 ttetettgte atteaggtee agaaacaaat tttaaaetga gtgagagtet atagaateea 420 tactgcagat gggtcatgaa atgtgaccaa atgtgtttca aaaattgatg gtgtattacc 480 tgctattgta attgcttagt gcttggctaa tttccaaatt attgcataat atgttctacc 540 ttaagaaaac aggtttatgt aacaaagtaa tggtgttgaa tggatgatgt cagttcatgg 600 geetttagea tagttitaag cateattitt tittittit titgaaagig igitaneate ttggtactca aaggataaga ccgaccataa tacttcactg aatattaata atctttacta 720 gnttacctcc tctgntcttt g 741

<210> 164

**<211> 781** 

<212> DNA

<213> Homo sapiens

## <400> 164

gagcactgga tttggagtca agaaacctgg acacttggct ccacacttcc ttagctgggt 60 aactttgggc aaaccgcttg gtctctcaag cctaaggttc ttcagctata aaatgggaat 120 aatacttcac taactacctc acagagttgt ggtaagaata taatcagata actggataaa 180 aacactatat aaactggaaa gegeegtaca aatgtgagag atcagtttta ttatcaaate 240 300 actgttttcc actgcctctt gaatcggctt tattctaacc aaccattaca tctttctcat 360 cttttggagt atgggtaatt gaggcttggg tgtgtcatca gggactggag ttatttcagc 420 tcccatgtag aggtgggaga ggtggttgat ggggcagtgg aagttagata ccagcgatgt atatggtagg acattttcct gggtcacttt gacagtacct tgggaaattg tcaatccttg 480 cagagggcct aggctgggca caagggagaa agcgaacagt tgactaagaa ttgaggggag 540 ggtctggagc gctactgccc tcctgtcatt gctgtgggtg ggagaggcta agactacagg 600 tttgactgga ggcctangag agaagagtgc cttagggttt caagaatttt aatgcctagc 660 agetgagtaa caggeattag tetgatagat agtgaaaggg gagaaagtge ceetgntgtg 720 780 agancacett tteanggeaa caactggett ggtateacea geaaccetta accetgggea 781

**<210> 165** 

<211> 734

<212> DNA

<213> Homo sapiens

## <400> 165

ttcttcagcc ctctatactt tttcataaaa gtcaccagtg actgcccagt tgccaaatag 120 aatgaatacc tttcagtgct cagctgtctt gacctctccg cagcatttca caccaccac 180 caaccctcag tgaaacaacc tcctccctta gcttttatga caccacaagt ctctggattc 240 tcagagaatc cagaaaaaca agtctctgga ttctctcctc ttacctctca gcccacacag 300 gctgagctgt ccttgaaacc tagatgggg aaatgtctgt ggctgtctgt ggtctcttct 360 tttcaggagt tgggtaggga ggaagaatca cagctgctcc tgcttcctct gtctgtctct 420

ctatttcctg agtcccttcc ttttcctgaa ctcagttctc ctcatgccaa ccatgtttat 480 gagctcctgc tgggaggaca gcatctgtga gtccttccct ctgtctctcc cagacaacac 540 agaggtttta gcctgtttgc taagagaccc catctaagtc agcccaaggg tgtggattag 600 gttttacagc atccaggccg cagtctggct aaactggatt accaggctgg tgggcagctc 660 ctnaccatga tcctgcacca gttagagcct gctgtagttg ggaaggacct gggattgtgg 720 naagatgtgn ttcg

<210> 166

⟨211⟩ 738

<212> DNA

<213> Homo sapiens

#### <400> 166

ataggccagt gccggggttt aagggccagg aaaggaagca ttcagggaat ttaggtgtag 60 ccagaagaaa atcaggtcct ggctccccag aagcaagaga gttcaagtga aggaaggagg 120 aggttcctgg atgtggatgt catcatttct gggaacactc ttaaatggag actcagattt cttagccaaa atttagggag gatccagaag aaaccaaaga cgaagcatcc cagttcttgg gtatttectg aaacagaaga aaatgacaaa ggcccaggaa tcactgaccc tggaggatgt ggctgtggac ttcacctggg aggagtggca gttcctgagc cctgctcaga aggacctgta 360 ccgggatgtg atgttggaga actacagcaa ccttgtgtca gtggggtatc aagccggcaa 420 acctgatgcc ctcaccaagt tggaacaagg agaaccacta tggacactag aagatgaaat 480 ccacagteca geccaeccag aaattgagaa agetgatgat catetgeage ageeettgea 540 aaaccaaaaa atactgaaga ggacgggaca acgctatgaa cacggaagaa ctttgaaatc 600 atatttaggt ttaaccaacc agagcagaag atacaacaga aaggacctgc tgagtttaat 660 ggagatggag cttttctnca tgataatcat gaacaaatgc ctacngaaat tgaattncct 720 gaagtagaaa acccatca 738

<210> 167

**<211> 575** 

<212> DNA

<213> Homo sapiens

#### <400> 167

aaaaaggaga ggaggggctc ctgggaacag ggctcagagg caggcgaggt ccctgattca 60 120 ctcactcact cactcattca ttcgttccca cacacactaa gcagacatgt gcccagcacc 180 teetttgtge caggeeccat etggatgtee atgeeagga agaggeagge agaeetggge 240 ctcccaggat ggaggacgga cgaagaccac tgagcatgat gagaggggaa aagctgaaat gtgagtggga agctcctgct caccacggca gcccctggc tagcacggcc tggcagagtc 300 catatggaag gaaggaacca ggttctatgg gatcatagag gagcggacgt gatgcagcct 360 ggaaaaggcg ccctggagct gagggtaggg atgccaatag gcattagcca ggctgtgggt 420 480 gggaggtggg gagaggggat ccctgcaaga ggcaccaagg cacaaaaagc agcttcctgg aggggaggtt cggaggtctc tgagcatcct atgaaatccc atagtgcttg ccttggatct 540 575 tccaggaagc atgagaccca ccnagctgan gacna

<210> 168

**<211> 868** 

<212> DNA

<213> Homo sapiens

# <400> 168

tgagggtatt gactgettte tttactgact gagtettgtt gaagcagagg aaatgtaatg 120 agceactgaa aaggttttat gtaaattaac attgtaaage cagttteaaa ttttattetg 180 ctactggtta aagaaagtaa agcatagagt ataacettgg aactatatgg ataaaaactt 240 aaagaateca gtggatttea tgtaagtaga actetagtga geeatagate ataaagattt 300 ttagggaagg tgaatgaaac agaataacea eteeaaaatg atteeteeag etggatacae 360 tgteaacatt cactgteeat ettggetaaa tttetaetgt aaaceaaaga tataaaaagg 420 gatatatgtg tacteettta eeeetttte ttteetagea gtagcagtee agtagagtaa 480

tttgtaaaca taaaagcaac attaaagtat gaggaaattt gaatataaaa ctgtaagaaa 540 ataatgtctc acatttgtca tatactgaaa gtattaaaca ggacccttcc atatgttct 600 tagcagtttg ctttcagtct taagtgctat ttcctcaggg tttcatacaa acttgacctc 660 tcaatcccag atcaattgat ttcctaggag tcatttgtat gtaataagca ggtgccccag 720 tataaataat gggtggatag aagcataata tctacatcag aagaccttgg tctatctgng 780 ctatcagcca actgcaggtt tctactagag ccatgactag aaagggntgc agataaatca 840 gatgntttca gaaaagaagt gtccacca

₹210> 169

<211> 861

<212> DNA

<213> Homo sapiens

# <400> 169

agtgggctcg aaacaaaggg ctgtccggtg gggattcgtc gcggcgcctt ctgagtggtc 60 gggtcgaggc ttctcggcct agcagtgccc tcgctgcgcg atctcaggcg ggttctcctc 120 ggctccgcgc agcccgcgcc gcggtggggg acccggcgca gcggcacctg ctgccgaggg 180 accoegcgge cegeceeggt getegtgatg gggetgatet tegecaaact gtggageete 240 ttctgtaacc aagaacacaa agtaattata gtgggactgg ataatgcagg gaaaaccacc 300 attetttace aattettaat gaatgaagtg gtteataett eteeaaceat aggaageaat 360 gttgaagaaa tagttgtgaa gaacactcat tttcttatgt gggatattgg tggtcaggag 420 tctctgcgat catcctggaa cacatattac tcaaatacag agttcatcat tcttgttgtt 480 gatagcattg acagggaacg actagctatt acaaaagaag aattatacag aatgttggct 540 catgaggatt tacggaaggc tgcagtcctt atctttgcaa ataaacagga tatgaaaggg 600 tgtatgacag cagctgaaat ctcgaaatac ctcaccctta gttcaattaa ggatcatcca 660 tggcacattc aatcctgctg tgctctcaca ggagaagggt tatgccaagg tctagagtgg -720atgacettee ggattggtgt gagataaett ttttgettga aagagaetge tetatttatt-780 840 ctgngacatg aacatttttt tctaagnacc ctttgctgnt aagcaacaac atgtttaatt 861 ataacaaccc aaaacctttg a

<210> 170

<211> 858

<212> DNA

<213> Homo sapiens

# <400> 170

| tttcttgctg | taccccggcg | atggaggcgc  | cggcttcgga | gtgcgcccgc | cgccgcagca | 60  |
|------------|------------|-------------|------------|------------|------------|-----|
| gcagcgctcc | tggaggaccc | cgccgtcccc  | cggctcaccg | ctgcccttcc | tgctgctgag | 120 |
| ctacccgagc | ggcggcggcg | gcagcagcgg  | cagcggcaag | caccatccta | attatctcat | 180 |
| ggctaatgaa | cgcatgaacc | tcatgaacat  | ggccaagctg | agtatcaagg | gcttgattga | 240 |
| atcagctctg | aacctgggga | ggactcttga  | ctctgactat | gcacctctcc | agcaattctt | 300 |
| tgtggtgatg | gagcactgtc | tgaaacatgg  | cttgaaagct | aaaaaaactt | ttctcggaca | 360 |
| aaataaatcc | ttctgggggc | ctctagaact  | ggtagaaaag | cttgttccag | aagccgcaga | 420 |
| gataacagca | agtgttaaag | atcttccagg  | acttaagaca | ccagtaggta | gaggaagagc | 480 |
| ctggcttcgt | ttggcattaa | tgcaaaagaa  | actttcagaa | tatatgaaag | ctttgatcaa | 540 |
| taagaaagaa | cttctcagtg | aattctacga  | acccaatgcc | ctcatgatgg | aagaagaagg | 600 |
| agccataatt | gctggtctgt | ggtgggtctg  | aatgtcattg | atgccaattt | ctgtatgaaa | 660 |
| ggagaagact | tggactctca | ggttggagtt  | atagattttt | caatgnatct | caaggacggg | 720 |
| aacagcagta | aaggtactga | aggagacgg t | cagattactg | caattctgga | ccagaagaac | 780 |
| tatgtagaag | actgaacaga | cattttaatg. | ctactgnaaa | caancttcag | gcaaagtaga | 840 |
| tgcnttagaa | aaatccac   |             |            |            |            | 858 |

<210> 171

<211> 692

<212> DNA

<213> Homo sapiens

<400> 171

gtctctgatt ctctgacacc acctaggtgt cccctaattt ggttcagttc tgacactagc 60 ttttcagggt tcgtgccggc ctcacaagtt ttgagggcta agtcccacaa gaccatcccc 120 atttccgtca ccagttgcat gtcctaagcc acctgtactt ctgatcaact ggctgtaaat 180 tggggttccc atgacctcac ttcaggttcc ataatttgcc aggacaactc acagaactca 240 gaaaggcact ttgcttattg ttagtggttc ctataaagct aggttgtcca acccgcggtc 300 caggatggct ttgaatacgg cccaacacaa atacttaaac tttcttaaaa catgatgagt 360 420 tttttttgaa attttctttt tctcatcagc tgcagttaat gttagtgtat tttatgtatg 480 gcccaagatg attettacag tgtgtgtggc ccagggaagc caaaagattg gacaccctg ttttaaagga tgcaacttag gaacagccca aaggaagtga cacacgggac gaggggtggg 540 agtococatg coccetgggg gagacacett ctagtgcace atcccaatga gttcatgacg 600 tggaggette ccacatecca tttttcaaga gtttttgcag eccagtette tggeecceca 660 ccccttccag angttggggt gtanggggtg cn 692

<210> 172

⟨211⟩ 838

<212> DNA

<213> Homo sapiens

### <400> 172

tagaagatgg agagtgttaa attatatttg tgataggaag cttagacata tcttttggtt 60 attagettee attgeeaatt gtattteaga tgeatagggt tttetteeea aaaatatatt 120 gttaactttt atagctaact agcacctgga aaaaatgtat ttgtacaact ttactattgt 180 atatagtttt ataataatga aaaataaacc caatggccat attagaatgc aatttcgaca 240 tacagcttat ctagatagtt ttccagagga ttttgaaatt tggcttaact gggaggataa 300 ctgctcagca caccactgaa acataaccac tgacaccatt catttatttt aactgagatt 360 cttgacattt ttctctccta tgccttgtta ctttagcata cttgaactca cataaatgct 420 tetttggatt acatgggeta tetgatteca ttttggatet gattgtecat ettgaattea 480 540 atatggtatt catctggact attcaaaaat tatgccattt ctagtctgtg aaataagatg taaaaaatct ttatttttgc cctttggtaa aaacctatgt gacaactttt aaaatgtgaa 600

gcaacatcta atatagttga ctggtatact aataggaaag tgaaagtatt tcatgggtac 660 tttgtcacag aatgtgaaaa gaaacttggc atantggcct ttataatgag gcatccactt 720 actcctctga agtgaagtct ggtagcttaa cttgggtata ggtttttgn aaggaaatct 780 catgaatctt cgntcatttc tcttggcctt cnctttttat ctcaaaatgg cacaagtt 838

⟨210⟩ 173

**<211> 872** 

<212> DNA

<213> Homo sapiens

# <400> 173

| aaagtcctaa | aaaactcttt | gcagtctaaa | cctcccaagt | tttttttt                                | tggaaccaag | 60   |
|------------|------------|------------|------------|---|------------|------|
| gcaactttac | ccactagaga | taacctagaa | aatttctatc | tttagttcaa                              | ctgaactctc | 120  |
| agtgttattt | catagaaacc | accccagtct | atttatatta | ttcaacacat                              | aattttggtt | 180  |
| agagaatttt | ttttttttt  | taaattaggg | atgggggtct | tgctgtgctg                              | ctcaggctgg | 240  |
| tctcaaactc | ctgggctaag | tgattccctg | actgtacctg | gccaagagaa                              | gtttttgtgc | 300  |
| tgtggcttac | cttagcatat | ttctctgctt | cttctcttat | atcttttgga                              | acaatttcat | 360. |
| gtcttccatt | agttactgta | aattaagcca | catgtgtaaa | tgaattttaa                              | attgagtacc | 420  |
| atattgtaac | ttgcagtata | ccataggatc | tacccaatcc | acatatctga                              | ctcacctaag | 480  |
| gttgcaaagt | tgtactatga | gtaatactcg | aatatttttg | tgtgctgctt                              | ctacatgaga | 540  |
| ttatatgtgc | ctacatatta | agttcttatg | gaaatgaaag | taaattatgc                              | tatttataaa | 600  |
| tcctgagcat | taatttatag | catagtatct | taaaaccatg | aaatggatgt                              | ttcaaaaaat | 660  |
| aacgtgttca | caacttaagt | caattattaa | gcagaacttt | cccttcatta                              | gacaacctag | 720  |
| taaatttgct | ttagctttca | ttatattaga | aaggacactc | agttgtaaat                              | tagctgnggt | 780  |
| acagatcatt | cctaaggcaa | ataaatggtc | cnaaaataac | ttacattcac                              | caacccagct | 840  |
| gagttctagt | tcaaaagctt | tatccttnac | tt         | • * * * * * * * * * * * * * * * * * * * |            | 872  |

<210> 174

<211> 816

<212> DNA

<213≻ Homo sapiens

# **<400>** 174

| ,   | tattatcatg | gctacaaagt | cttgtgtggt | ctgggccaca | tcctgtgcca | ggctcccttt | 60  |
|-----|------------|------------|------------|------------|------------|------------|-----|
|     | cattgtctat | attccagtca | agctggcctt | caaaatttca | gcacattggg | tctttctgcc | 120 |
|     | acaggccctt | gcacatacat | gcttttccct | ctgtacatgt | gattttcttt | catccccgct | 180 |
|     | ttccaaagct | aactctgact | catccttcag | actgcatctt | aatgattact | tccttctgga | 240 |
| ,   | agactcccct | aattttcaca | actagatgag | ctctccctta | tatgttgaaa | acaagtattt | 300 |
|     | cttgtgtgaa | cagaaatgtt | taatgtctgc | cttcccaact | cagccacaag | ctctgtgagg | 360 |
|     | atggggactc | agtctttgca | tccctcagag | cctagcatag | tctcagttaa | tacgtgatag | 420 |
|     | ctggagcgtg | acatttcatt | aggaacagtg | aggctagttg | agaaattata | cctcaccagt | 480 |
|     | atataggaga | gtaccattag | gaattettaa | tgggatgaaa | acctgaattc | atgtctagac | 540 |
|     | cctgccacct | gctggctgtg | ctgttttaaa | taaattgcag | atcctctcag | agcctgtttc | 600 |
|     | ctcatatata | aaataatggg | gatcctaaca | gcccctcat  | atggttgtag | caggaattta | 660 |
| : 1 | attaaataat | atatggaaaa | gcatttttt  | aactgnaaaa | ccatacataa | atatcctttg | 720 |
| 1   | ncacttttcc | cagtgcatga | cacactgggt | cattaaacat | ctattgggat | gggtggatgg | 780 |
| į   | gttggataga | tggacnggac | nggaattaac | aggtta     |            | •          | 816 |

<210> 175

<211> 834

<212> DNA

<213> Homo sapiens

# <400> 175

| agtggtagcg | gttattcggc | ggcccgcggc | ggaccatggc | cctggcccgg | cgtcgctggg | . 60 |
|------------|------------|------------|------------|------------|------------|------|
| ctttcctcac | ggcgtccccg | agcagcgtcg | cagagcgggc | cgacttccgg | gaaggaactg | 120  |
| accagcgact | gagcggcggc | cggcgcgctt | agcgccctga | acatgcggca | gtccctgcgg | 180  |
| gcgaccccgg | gctccggaca | ggcggcggcg | gaggcggcgg | ctcgggaggg | aaggaggcgg | 240  |

cggcgccggc ggaggtggcg gcggagacgg ccggcgcccg gcgcggagcc ctagggaggc 300 agttcagcgc ggcctcgggc ctcgtcgaga aggatgctgt cccgaaagaa aaccaaaaac 360 gaagtgtcca agccggccga ggtgcagggg aagtacgtga agaaggagac gtcgcctctg 420 cttcggaatc ttatgccttc attcatccgg catggtccaa caattccaag acgaactgat 480 540 atctgtcttc cagattcaag ccctaatgcc ttttcaactt ctggagatgt agtttcaaga aaccagagtt teettagaac teeaatteaa agaacacete atgaaataat gagaagagaa 600 agcaacagat tatctgcacc ttcttatctt gccagaagtc tagcagatgt ccctagagag 660 tatggttctt ctcagtcatt tgtaacggaa agttagtttt gcttgttgaa aatggagact 720 ctggttcccg atattattat tcaagacaat tttttttgat ggtcanaaga aagccggcca 780 ctttggaaga tcgtgcccaa tgaaagacta ccggattntt tantgaaatt ccaa 834

<210> 176

<211> 720

<212> DNA

<213> Homo sapiens

## <400> 176

aaattgggag ggcttcttgc aggctgctgg gctggggcta agggctgctc agtttccttc 60 agcggggcac tgggaagcgc catggcactg cagggcatct cggtcatgga gctgtccggc 120 180 ctggccccgg gcccgttctg tgctatggtc ctggctgact tcggggcgcg tgtggtacgc gtggaccggc ccggctcccg ctacgacgtg agccgcttgg gccggggcaa gcgctcgcta 240 300 gtgctggacc tgaagcagcc gcggggagcc gccgtgctgc ggcgtctgtg caagcggtcg 360 gatgtgctgc tggagccctt ccgccgcggt gtcatggaga aactccagct gggcccagag attctgcagc gggaaaatcc aaggcttatt tatgccaggc tgagtggatt tggccagtca 420 ggaagettet geeggttage tggeeaegat ateaactatt tggetttgte aggtgttete 480 tcaaaaattg gcagaagtgg tgagaatccg tatgccccgc tgaatctcct ggctgacttt 540 600 gctggtggtg gccttatgtg tgcactgggc attataatgg ctctttttga ccgcacacgc actgacaagg gtcaggtcat tgatgcaaat atggtggaag gaacagcata tttaagttct 660 tttctgtgga aaactcagaa aatcgantct gtgggaagca cntngaggac agaacatgtt 720

<210> 177
<211> 240
<212> DNA
<213> Homo sapiens

<400> 177

ttttactttt ggtttaaact ttatgaagag accacaggac tctttcgagg ccctgtaatt 60 ggaatgagtc cactttaaat cctttaacga ggatccattg gagggcaagt ctggtgccag 120 cagccgcggt aattccagct ccaatagcgt atattaaagt tgctgcagtt aaaaagctcg 180 tagttggatc ttgggagcgg gcggncgngc ctcgnatacc aacatttaaa atgatggcat 240

<210> 178
<211> 809
<212> DNA
<213> Homo sapiens

<400> 178

ggtaagtgac cctcgggcct cgccatgaag agccgcttta gcaccattga cctccgcgcc 60 gtactcgcgg agctgaatgc tagcttgcta ggaatgagag taaacaatgt ttatgatgtg 120 gataataaga cataccttat tcgtcttcaa aaaccggact ttaaagctac acttttactt 180 gaatetggca tacgaattea tacaacagaa tttgagtgge etaagaatat gatgeegtet 240 agttttgcca tgaagtgccg aaaacatttg aagagtcgga gattagtcag tgcaaaacag 300 cttggtgtgg atagaattgt agattttcaa tttggaagtg atgaagctgc ttaccattta 360 atcattgagc tctatgatag ggggaacatt gttcttacag attatgagta cgtaatttta 420 aatattctaa ggtttcgaac tgatgaggca gatgatgtta aatttgctgt tcgtgaacgc 480 tatccacttg atcatgctag agctgctgaa cctttgctta ctttggaaag gttgactgaa 540 600 atagtagcca gcgcacctaa gggtgaacta ctgaagaggg tgcttaaccc attacttccc tatggaccag ctctcattga acactgtctt ttagaaaatg gattctcggg taatgtcaaa 660

gtggatgaaa aacttgaaac taaagatatt gaaaaagtac ttggttctct gcagaaagcn 720 gaagactata tgaaacaaca tcaacttcag tgggaaaggg atatatcatt cagaaaagag 780 aaatannacc atgcttggga agccgataa 809

<210> 179

<211> 913

<212> DNA

<213> Homo sapiens

# <400> 179

| aggaagctgc | atgcatgaga | cccacagact | cttgcaagct | ggatgccctc | tgtggatgaa | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| aĝatgtatca | tggaatgaac | ccgagcaatg | gagatggatt | tctagagcag | cagcagcagc | 120 |
| agcagcaacc | tcagtccccc | cagagactct | tggccgtgat | cctgtggttt | cagctggcgc | 180 |
| tgtgcttcgg | ccctgcacag | ctcacgggcg | ggttcgatga | ccttcaagtg | tgtgctgacc | 240 |
| ccggcattcc | cgagaatggc | ttcaggaccc | ccagcggagg | ggttttcttt | gaaggctctg | 300 |
| tagcccgatt | tcactgccaa | gacggattca | agctgaaggg | çgctacaaag | agactgtgtt | 360 |
| tgaagcattt | taatggaacc | ctaggctgga | tcccaagtga | taattccatc | tgtgtgcaag | 420 |
| aagattgccg | tatccctcaa | atcgaagatg | ctgagattca | taacaagaca | tatagacatg | 480 |
| gagagaagct | aatcatcact | tgtcatgaag | gattcaagat | ccggtacccc | gacctacaca | 540 |
| atatggtttc | attatgtcgc | gatgatggaa | cgtggaataa | tctgcccatc | tgtcaaggct | 600 |
| gcctgagacc | tctagccccc | cagcataccc | cggctcangg | gacacggaca | caggcccagg | 660 |
| ggagtcagaa | acctgtgaca | gcgtctcaag | ctcttctgag | ctgctncaaa | gtctgtattc | 720 |
| accttccagg | tgccaaagag | agcacccacc | ctgcttcgga | caaccttga  | cataattgcc | 780 |
| cagcacggca | anangaggtg | gcattccacc | agcccaaggc | attcgacatt | tgcanaatga | 840 |
| aaattccttc | ttaatgggaa | gaagaatccc | ttaaaaatgg | ggtcaaggat | ccccnatgaa | 900 |
| ttnttctggt | tcc        |            | ·          |            |            | 913 |

<210> 180

<211> 684

# <212> DNA

# ⟨213⟩ Homo sapiens

# <400> 180

| aaaacgctgc | gctggagcgg | ggccggcggc | gagtcccagg | gacccaacca | gagcctggcc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tgggagccag | gatggccatc | cacaaagcct | tggtgatgtg | cctgggactg | cctctcttcc | 120 |
| tgttcccagg | ggcctgggcc | cagggccatg | tcccacccgg | ctgcagccaa | ggcctcaacc | 180 |
| ccctgtacta | caacctgtgt | gaccgctctg | gggcgtgggg | catcgtcctg | gaggccgtgg | 240 |
| ctggggcggg | cattgtcacc | acgtttgtgc | tcaccatcat | cctggtggcc | agcctcacct | 300 |
| ttgtgcagga | caccaagaaa | cggagcctgc | tggggaccca | ggtattcttc | cttctgggga | 360 |
| ccctgggcct | cttctgcctc | gtgtttgcct | gtgtggtgaa | gcccgacttc | tccacctgtg | 420 |
| cctctcggcg | cttcctcttt | ggggttctgt | tcgccatctg | cttctcttgt | ctggcggctc | 480 |
| acgtctttgc | cctcaacttc | ctggcccgga | agaaccacgg | gccccggggc | tgggtgatct | 540 |
| tcactgtggc | tctgctgctg | accctggtag | aggtcatcat | caatacagag | tggctgatca | 600 |
| tcaccctggt | tcggggcagt | ggcgagggcg | gncctcangg | caacagcanc | gcaggctggg | 660 |
| ccgtggcctt | ccctgtgcc  | atcg       | •          |            | •          | 684 |

<210> 181

<211> 785

<212> DNA

<213> Homo sapiens

# <400> 181

| aatgaccata | attaatttat | gctctcaaaa | aataagtaaa | aggaagaaaa | tttttttaat | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| aaataaaaag | acatcaaact | taaatgtgta | aattggtaca | gcttaagtga | atttgtgatt | 120 |
| tatgtctgct | gtaattttt  | ttatattagg | aagtttcagc | tatgaaggaa | attttacact | 180 |
| tcaaaaagct | gttcagtggc | agaaaatatg | ataatgacag | attagatcac | aatatgctaa | 240 |
| ttttttcaga | gttacctctc | gtgtaacaca | gcttttgaaa | atatttgaat | agtactatat | 300 |
| tctttttaa  | gtgaaaaaaa | aaaagaaacc | tgtaattgct | ttataaagat | tcagtgtgct | 360 |

tcagcttcac tttgaatata tccacttagt ataatctaac attggttttc ttaataatgg 420 ttgtgtgact tacatgttag gaatcttcac agtacacatt ttacttttta tctgtttctc 480 agaaaatatt gactgttatt tatcactaaa ctcataatat gcttaggcac taaccttcaa 540 caatacagta acatctttag atttctaccg aattgtgaat atgttattag atgaatattt 600 acctctccat gtgtttctgg cacatatctt caaagcataa ctattatgaa taaaattata 660 catttataac cactgtgaat agttacgtat ttaattactc agaactgtcc atgagaaata 720 ctatagaaat tatttaccat gtggngnatt ttatataaat tcattataat tgggngaaag 780 785 attaa

<210> 182

<211> 699

<212> DNA

<213> Homo sapiens

# <400> 182

accettaccc ggggcaacag ctgagccgtc tgggaaggga tgcatctttt cttctgtatg cttgagtcaa gaactctaag tcatcttggt aataccgggt tggatgctta aagctgcagc aaaaagacca gaactttcag ggcttctcaa atttaataac tatggaatct tatcagaaag 180 tccattaaca tctcaaagaa caacgtggtt attgtatcaa tcaccatcct ttataccagg 240 atttgcatat ccttcaagat gcctgaagac aatcggaggg gtatacaagc aagcgaggtt 300 aagaacaatc acttttcaga tcctaaactt ttatatgtag tgtctgctga taatgcattc 360 cctgagaaaa tggacctgtg gataaaccat catgcttcat ctcatttcct gtctcctctt 420 teaccatttt tetttetttt ettttetttt ttttttttt ttettgagae aagetettge 480 tetgteacet aggetggagt geagtggegt gateatatet caetgeaace taaaacteag 540 gctcaagcag taccetcace teageeteee gagtggetgg gactaacagg egcactecat 600 catgcccgaa taatttttgg taattttttg anagatgggg cttgctttgn tgnctaggct 660 699 ggcttgaact gggctcaagc gatcctccac tttggcctt

<210>, 183

<211> 613
<212> DNA
<213> Homo sapiens

<400> 183

| gttcgcaccg ccc | ccgcccg caagaaa  | gat ggcagtggcc | tgatccgggc | ccgttggcgg | 60  |
|----------------|------------------|----------------|------------|------------|-----|
| cgtcactgac gct | tcgctcc, ggtcctc | gga tcccgagcgc | ggggaggcag | accgactgtg | 120 |
| agctgcttgt ccc | catcctg cggccgt  | cct ggggacacag | agccctccgt | ggtgcccggg | 180 |
| gattggattg gag | ccaggac gcggagc  | cgc ggcggagccg | gaggaagctg | atggtcatct | 240 |
| tttccaaggt gga | tgtgaac actgacc  | gga agatcagtgc | caaggagatg | cagcgctgga | 300 |
| tcatggagaa gac | ggccgag cacttne  | agg aggccatgga | ggagagcaag | acacacttcc | 360 |
| gcgccgtgga ccc | tgacggg gacggtc  | acg tgtcttggga | cgagtataag | gtgaagtttt | 420 |
| tggcgagtaa agg | ccatage gagaagg  | agg ttgccgacgc | catcaggctc | aacgaggaac | 480 |
| tcaaagtgga cga | ggaaaca caggaag  | tcc tggagaacct | gaangaccgc | tggtaccagg | 540 |
| cggacagccc ccc | tgcagac ctgctgc  | tga cggaggagga | gttcctgcgt | tccttcaccc | 600 |
| cgagcacagn cgn |                  |                | ,          |            | 613 |

<210> 184

<211> 682

<212> DNA

<213≻ Homo sapiens

# <400> 184

| gaccaggatg | attttagcat | acgctggtag | gaaaatgaaa | tttaaagtga | ttttcttaca | 60. |
|------------|------------|------------|------------|------------|------------|-----|
| tttttatcag | tgtaggtttt | ggtcattaaa | aattttcact | ccagttcttt | ttatgtttat | 120 |
| tttgacttct | gatttatcta | ggaactagaa | cctctggttg | gtgaacagtt | gctccagtta | 180 |
| tgggaacgtc | ttcccttggg | agaaaaaaac | acaactgatt | gacactcagg | ttataccatc | 240 |
| ttgactttga | gtattggcag | tatttgtgat | cattaggaac | ctttcagatt | atttatcttt | 300 |
| ttttttcccc | tttcttctag | aactcttagc | tgtggaagaa | catcatgcct | atttataacc | 360 |

actgaatgca ctgactttca aaaactgagg tggggtgtgt gttacgaatg ggctttttaa 420 cacttttaga gtgttgcttt agaactacca tcttcatata caggagaaag gaagcattta 480 aatttttata gtgattatag agaatgatta tatgatgttt gtaatgaata aaatagtagt 540 ttcattattt ggcacaatag cagtttattt taaacaaaca atttgaagtt aaacatttca 600 tttttaaaaa cactgaatta cagntcttat tgatgacttt ttaatgcana gnaagttgtt 660 taagaaaggc ctgaatatat ca

<210> 185

⟨211⟩ 858

<212> DNA

<213> Homo sapiens

#### <400> 185

agaaaagagg atgttctttc ttgaaaataa gcgacgacat tgtaggtcct atgaccgacg 60 tgctcttctt ccagctgtgc aacaagagca ggagttctat gagcagaaaa tcaaagagat 120 ggcagagcat gaagactttt tgcttgccct acagatgaat gaagaacagt atcaaaagga 180 tggccagctg attgagtgtc gctgctgcta tggggaattt ccattcgagg agctgacgca 240 gtgcgcagat gctcacttgt tctgcaaaga gtgtctcatc agatatgccc aagaggcagt 300 360 ctttggatct ggaaagttgg agctcagctg catggaaggc agctgcacgt gttcgttccc 420 aaccagtgag ctggagaagg tgctccccca gaccatcctg tataagtact atgagcgaaa agccgaggag gaggttgcgg cagcctacgc cgacgagctt gtcaggtgcc cgtcctgtag 480 540 ctttccggct ctgttggaca gtgatgtgaa gaggttcagc tgtcctaatc ctcactgccg aaaggaaacc tgtaggaagt gtcagggact ctggaaagaa cataatggcc tcacctgtga 600 agagetgget gaaaaagaeg acateaagta eegtaeetet attgaagaaa aaatgaetge 660 tgcccgcatt agaaaatgcc caagtgtggg actggcctca tcaaatctga aggctgnaac 720 ccgnatgtct ttgccgctgt ggtgcccaga tgtgctacct ctgtcgagnt tctattaatg 780 gatatgacca tttctggcaa catccccgtt accaggagcc ccttgccagg aatggtcaag 840 atgctctntn tggaccga 858 <210> 186<211> 805

<212> DNA

<213> Homo sapiens

⟨400⟩ 186

taattatatg gcagggtttt ggttagccaa aaaaaacttc tttttaaata atccagtgaa 60 ggatttttta agcttttaaa atgttaaatt ctgatagtct taaattgaag tcaaagcatt 120 tetttttte ttttteett agaettettt atgatetaag acaettatga aggtaceagg 180 240 tgccctaatt gaccttaaaa ggttagaaat gaatctttgc cttgatgcaa agcatcagac 300 ttgatgcaaa tcaacatata aataactgca agcaaatata gagtcaactc tggactattt 360 aattttggtt tatctgtggc taatcttgtt ttcaaatgca tggacagaac ctattcaact acaatgagta tgggctcaat cctaccttgt tggtatctca aatcccctg tttactttta 420. ggeagtaact gcctttgaaa acagaacatt tcccttttcc agagcagacc ttacctcagt 480 ctctgaaatg ggttgacttt cagggaagac tcaacaggct tccaggtgtg aaaacaggaa 540 ggtcatctta aattagattt taatattatg gcctcattgc ttcatcattt tgctagaagg 600 aaatteeetg aatateagat acaccectat teaaataaaa teacaaaace atetactaaa 660 gctaaacagt ttttcaaaac cattctgaat tatgcagtaa tatttccttc tgtaagaata 720 tgctctggtc tgtaaaccga gtattgagag aattgagaat naaaccactt cgcagatagc 780 805 atgaanagga aatgaggnat gaagt

<210> 187

<211> 805

<212> DNA

<213> Homo sapiens

<400> 187

ttaaaagaaa etatttaatg taaaatatte tacatgteat teagatatta tgtatatett 60 etageettta ttetgtaett ttaatgtaea tätttetgte ttgegtgatt tgtatattte 120

actggtttaa aaaacaaaca tcgaaaggct tatgccaaat ggaagataga atataaaata 180 aaacgttact tgtatattgg taagtggttt caattgtcct tcagataatt catgtggaga 240 300 tttttggaga aaccatgacg gatagtttag gatgactaca tgtcaaagta ataaaagagt ggtgaatttt accaaaacca agctatttgg aagcttcaaa aggtttctat atgtaatgga 360 acaaaagggg aattetettt teetatatat gtteettaca aaaaaaaaaa aaaagaaate 420 aagcagatgg cttaaagctg gttataggat tgctcacatt cttttagcat tatgcatgta 480 acttaattgt tttagagcgt gttgctgttg taacatccca gagaagaatg aaaactggtt 540 ggaaactaaa ggttcattgt gttaagtgca attaatacaa gttattgtgc ttttcaaaaa 600 tgtacacgga aatctggaca gtgctgcaca gattgataca ttagcctttg ctttttctct 660 ttccggataa ccttgtaaca tattgaaacc ttttaaggat gccaagaatg cattattcca 720 caaaaaaaca gcagaccaac atatagagng nttaaaatag catttctggg gcaaattcaa 780 actettgggg tetaggacte acatn 805

<210> 188

<211> 866

<212> DNA

<213> Homo sapiens

#### <400> 188

gcgggcggc tgctgaggtg gctgtcgccg gccccgatgg acgctcccc gggcggggtt 60 gagtcggcgc tcagctgctt ctctttcaac caggactgca catccctagc aactggaact 120 aaagccgggt ataagctgtt ttctctgagt tctgtggagc agctggatca agtccacgga 180 agcaatgaaa tcccggacgt ctacatcgtg gagcgcctct tctccagcag cctggtggtg 240 gtagtcagtc acacaaaacc acggcagatg aacgtgtatc acttcaagaa aggcacagag 300 atctgtaatt acagctactc cagcaacatc ttgtccataa ggctgaaccg gcaaaggctg 360 ctggtttgcc tagaagagtc catttatatt cacaacatta aagacatgaa gctgttgaag 420 accetectgg atattectge aaacceaaca ggtetatgtg etetetetat caaccattee 480 aattettace tggcctatee tggaageetg actteagggg agattgtget ttatgatgga 540 600 aactccctga aaacagtctg cactattgct gcccatgagg gaacactagc tgccatcacc

ttcaatgcct caggctccaa actagcaagt gcgtctgaaa aaggcacagt catccgggtg 660
ttctctgtcc ctgatggca aaagctctat gagttccgga gagggatgaa aaggtatgtg 720
acaatcagct ctctagtggt caatatggat tcacaattcc tctgcgcctt cagtaacacc 780
gagacggtac acatcttcaa gctggacagg tcaccaacag tcgaccagaa gagcctttga 840
nctggagtgg cttcctnggg aaagan 866

<210> 189

<211> 760

<212> DNA

<213> Homo sapiens

<400> 189

gtaagattet tgttgggage ttaagaatag atteetgage taggeetttg gagaetetgg catgctgtgt ctaggaggga gtctgtaaaa caatttttaa tgaagaaatt taaaaattac 120 acaaaactag aatagtgcat tggtactcaa catccagatc tgacacttat cactatctta 180 ccatgtttgc ttcatttgtc attttttgt ttgcttaagt atcttaaaat cccatacatt 240 gtgttatttc actgctgtga acactttggg tagataccac gatatcacac ctaacagagg 300 cagcagcagt ccttcggctt catctcatag ccagtcctta ágcaaatttc cctgattatc 360 tcaaaaatca tcttctagtt ggtttgttag aatcaacaga atataagtca catgatgatc tegtttttaa caateacete agatgaettt gatgttaget aetttgagaa ceaetggaaa 480 ttattttgcc aacttgaaag ttcaagttag gataccacaa ttcttggcac gtttggtgga 540 ttataaatgt gattttgaaa tattagagga agcatttggg gttaatgaca ggatatgaat 600 ttatattagt aagtttgata agataaaatt tcctcagtga acggagaatc tcagccccat gggctctaat tgattgggac ttgtgtaaga gcgtggtcac agnttaatcc aactggactg •720 tatgctgngg nctcactcat ggtggggctt atttacactg 760

<210> 190

<211> 850

<212> DNA

# <213> Homo sapiens

# <400> 190

| caaagaatgt | cttaagatta  | tgataattaa   | agaagtccca  | ggacgagaca  | 60   |
|------------|---|--|---|---|--|
| aagattttgt | atgcaagtcc  | acaaagtctg   | tcagacatat  | tgtaaataat  | 120  |
| ttttattttc | aacaatgtta  | atgtattgac   | atttagcata  | tatctgttag  | 180  |
| tatcacaatg | ttttattcct  | tgcaccagcc   | ctttactatt  | ttctaacaaa  | 240  |
| cacaatttca | gggcataaac  | aagaagtgtt   | tatttttccg  | tagtacatct  | 300  |
| tagagattgg | ctgttctaag  | atgtgctcat   | gcaggcttga  | ctctaaacta  | 360  |
| gtcattttgt | tctggtctgg  | tctacacgta   | ggttattctt  | ttgaaagcag  | 420  |
| taagcatgtt | cttctcttag  | tggagtttgg   | agatgctaat  | atcgacaggt  | 480  |
| tgctccttaa | agtctaaact  | agaattgcca   | cactgtcttc  | ctaaggttca  | 540  |
| gaaatctcat | ggcaatttcc  | aacattagtg   | ggacaagaga  | ttatactact  | 600  |
| tggaggtggg | gaaaggaatg  | attatttctg   | tatcataatc  | taccatagtc  | 660  |
| tgcctcttgc | tacttcccaa  | tgntttacta   | atcacattga  | cttttaaaaa  | 720  |
| taggaattca | agaaaaatac  | ttattttcta   | aataaatcac  | cagcaaggac  | 780  |
| ggctcactac | ccccaatatc  | ctaacaccac   | ttaccaaata  | ccgngtataa  | 840  |
|            |   |  | . !   |   | 850  |
|            | aagattttgt ttttattttc tatcacaatg cacaatttca tagagattgg gtcattttgt taagcatgtt tgctccttaa gaaatctcat tggaggtggg tgcctcttgc taggaattca | aagattttgt atgcaagtcc ttttattttc aacaatgtta tatcacaatg ttttattcct cacaatttca gggcataaac tagagattgg ctgttctaag gtcattttgt tctggtctgg taagcatgtt cttctcttag tgctccttaa agtctaaact gaaatctcat ggcaatttcc tggaggtggg gaaaggaatg tgcctcttgc tacttcccaa taggaattca agaaaaaatac | aagattttgt atgcaagtcc acaaagtctg ttttatttc aacaatgtta atgtattgac tatcacaatg ttttattcct tgcaccagcc cacaatttca gggcataaac aagaagtgtt tagagattgg ctgttctaag atgtgctcat gtcattttgt tctggtctgg tctacacgta taagcatgtt cttctcttag tggagtttgg tgctccttaa agtctaaact agaattgcca gaaatctcat ggcaatttcc aacattagtg tggaggtggg gaaaggaatg attattctg tgcctcttgc tacttcccaa tgntttacta taggaattca agaaaaaatac ttatttcta | aagattttgt atgcaagtcc acaaagtctg tcagacatat ttttattttc aacaatgtta atgtattgac atttagcata tatcacaatg ttttattcct tgcaccagcc ctttactatt cacaatttca gggcataaac aagaagtgtt tatttttccg tagagattgg ctgttctaag atgtgctcat gcaggcttga gtcattttgt tctggtctgg tctacacgta ggttattctt taagcatgtt cttctcttag tggagtttgg agatgctaat tgctccttaa agtctaaact agaattgcca cactgtcttc gaaatctcat ggcaatttcc aacattagtg ggacaagaga tggaggtggg gaaaggaatg attatttctg tatcataatc tgcctcttgc tacttcccaa tgntttacta atcacattga taggaattca agaaaaatac ttattttcta aataaatcac | caaagaatgt cttaagatta tgataattaa agaagtccca ggacgagaca aagattttgt atgcaagtcc acaaagtctg tcagacatat tgtaaataat ttttatttc aacaatgtta atgtattgac atttagcata tatctgttag tatcacaatg ttttattcct tgcaccagcc ctttactatt ttctaacaaa cacaatttca gggcataaac aagaagtgtt tatttttccg tagtacatct tagagattgg ctgttctaag atgtgctcat gcaggcttga ctctaaacta gtcattttgt tctggtctgg |

<210> 191

<211> 864

<212> DNA

<213> Homo sapiens

# <400> 191

tttcatgccc ttgttttaaa aaaactactt tttttggcct caaaaaaatc aagggtgtaa 60
tttttaataa attgttaatc ctatgttttg taattttcat tttaggagct tgacttattt 120
ttttctctct cataaaaaca catttgtttt aattgtagga gaaattttct cagcattttg 180
catgttcttt ctaatctttg ttggtctgaa tatattggta gtaattactg taattattca 240

| acaaaaagca | tatccgttca | aaaattttc  | cactatgtct | tttttctagt | ggctactgtt | 300 |
|------------|------------|------------|------------|------------|------------|-----|
| ttagttttct | agttgaatat | ctctgacaag | ctttcgtatg | gttttgttat | attaagtgtg | 360 |
| tttcaaagtg | aagactacag | cacctcgccg | gtactgtgtg | aggcccaaca | gtggaattat | 420 |
| tgacccaggg | tcaactgtga | ctgtttcagt | aatgctacag | ccctttgact | atgacccgaa | 480 |
| tgaaaagagt | aaacacaagt | ttatggtaca | gacaattttt | gctccaccaa | acacttcaga | 540 |
| tatggaagct | gtgtggaaag | aggcaaaacc | tgatgaatta | atggattcca | aattgagatg | 600 |
| cgtatttgaa | atgcccaatg | aaaatgataa | attgaatgat | atggaaccta | gcaaagctgt | 660 |
| tccactgaat | gcatctaagc | aagatggacc | tatgccaaaa | ccacacagtg | tttcacttaa | 720 |
| tgatacccga | aacaaggaac | taatggaaga | gtgtaaaaga | cttcagggag | aaatgatgaa | 780 |
| gctatcagaa | gaaaatcggc | cctgagagat | gaanggttaa | ggctcaaaaa | ggtagcncat | 840 |
| tcggataacc | tggacacctn | actg       |            |            |            | 864 |

<210> 192

<211> 706

<212> DNA

<213> Homo sapiens

# <400> 192

ggaaagatga ccgatggagt ccaaagccaa gtggcttcac cagctgacaa gccacctcc 60 120 tgcagcctga gtttcacagt ccactgggtt cgttgtcatg cggtgtttga atggttaagc ccttgcagta tttcagatcg ggcaaaaaat atcggatgca catagcagaa ccattggtgg 180 240 tatttatage tttgetttgt acteeteact gtttetgeet acgeaaaata teeatgttte 300 ctctgagaaa tctgttgtgg actgaaagcg ctgctggctg tgaaatttaa taaagtgtgt atgetttget agaaaattat ttettggaca ataggaacag teattgatet gtaaateetg 360 gctcttaaca gtgagtggcc aaggacttga tcagcccatt tcttggtccc tcagtgcttt 420 aaaatttaag tagcactgca ttttgtaatg ttgaatatga ctctagtgac ttgtaggagg 480 cacttgtgag gagatgcttg cttcagtgta aaagatgctc atggcctgag tcagttgagt 540 600 tttctttcaa gaaaccactt cagagtgaaa tatccagggt ttccccgccc tggacatgtc 660 cagcotgoco aggoagoaca cagnoctgta agtocacoto gtgtgggtga gatttootoo

# tgcgtgatga cctcatcgnc atctctgctg gctcattcca cagnet 706 <210> 193 **<211> 719** <212> DNA <213> Homo sapiens <400> 193 ttttttttgc gagtggcggg ccgactgtgt agtccgctcc ggcagcgcgc tctgcccggc ttcctcagtc tcctcgccgg gagcgtccgg gagcagctcc gaggccgcgg cgaaaccagg 120 tggagtccga ggttcggagg agtatcagag gttaggggaa ggccggagaa tgggctggga 180 ggctgcgttt cggagcttag ggttctgtcc ctgcgatcgc cgcgtctccc tcccttggtg 240 ggcgcggctc ccgggaagcg gctcgtctcg tctccctca caggccgggt tcccgttctg 300 gaccttcgcc ctcggaacac agtgctgttg gccgggactc cttcccgagg tggacggctc 360 cctgttctca ttcctggctc tgccagaact gtaggaagtg ctcagtacac tttagggcat 420 gcatggcact ccctgggaga cagtgcttta gggccagagg aaagatcttc cctgaaggca 480 aacgcccgcg gagcccacaa gtccgggccg cactgaacaa gtcaggatgt tgccatcggc 540 aattetgeag aaggeagtaa eecatetgag agaaagagee getgteataa ggtetettge 600 ttgagctgct gggttgagaa tggagctgga agagggaact gatctcggac tccttgggga 660 tettggttat gtttgaceet tttaetttea ggganeangg atgggeeace ganaeecea 719 <210> 194 <211> 826 <212> DNA -<213> Homo sapiens <400> 194 60 tttagaatga atagcccttc tgggttttct ttttgacaat tcttggactt gaggtaaaac

aaggaggatt gtggccggat ttcagatccc aaagccagcc tccatcttag gcctttgcct

cattgtgcct tttaggtttt cttacccacc gtctcctgtt ttgtcttttt tttctttct cctacccta tcttgggaca ttcagaaact gcctgggtgg tttgagaaga gacaacccag 240 tttgatetge aatacaagga tecattegta atetetetet caetgatgtt attececcat-300 ctgccgtctt ggttcatctc accacagaag ggcatttagt cctacccagc catcggctgc 360 gtatgacage aggatggeae tteccattte tetgtggtta gtgetegagt gaaaacetet 420 ttcagctgag tcctctgagg ttctgctgtt gagtcctggg tggctgatgg aatgattgag 480 540 gaggtetggt cacceteaag egeegteate geettgttte catgggette tgteacacaa 600 aatgaagaac agaaatgtta ggacttaaga gaatgtttgg aattcacacc tctttgcagt cctttcaagg ctgctgctct gtgctgtgtc ccatgcatgt gaaagtagag ctgtgatggc 660 720 tgctgggacg cttgcaaaga tcatgtgtga gaattgagca caagaccaca aantattact 780 gcttgatgcg cttggtaaaa ctctatctgc caggaaaccc aaattttctt ttctttcctt 826 ttttttttg agacagggcc cnccttgttg cccaancttg aatnca

<210> 195

<211> 737

<212> DNA

<213> Homo sapiens

## <400> 195

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| caaaaaatga | ctcattcaaa | accaattttg | gttttagctg | caggcagtga; | cataaatgcc | 660 |
|------------|------------|------------|------------|-------------|------------|-----|
| cagtgcttac | tactccagat | ttctggttcc | ttcttttaac | tctgaagttg  | atggcttata | 720 |
| gnctatagen | aaaacna    |            | •          |             |            | 737 |

⟨210⟩ 196

<211> 824

<212> DNA

<213> Homo sapiens

# <400> 196

| cattaaaaag cccagcttt | c ctccatgtta | gatgtgactt | ggaaaatgag | aaagatttag | 60  |
|----------------------|--------------|------------|------------|------------|-----|
| caaaattcca ccgtatctt | t tgccaggcta | gagacaggga | gagcagggta | aaaccctcag | 120 |
| gctgctgaaa tttctaggc | t gttaggaagc | ccctcgaatt | ctgtgaaaat | gagggtttct | 180 |
| taactcacac tgagagcgg | a aaggggcaga | cccttttcat | aactccctca | agtgtgtgtt | 240 |
| acctttcttt accagcatg | g taagcaacag | gacatatccc | agcctcggac | atgtctgtat | 300 |
| gatccaaggt acccaaagt | c agacagagta | aactcaagcc | tggcactggc | tttctgccgc | 360 |
| ttcatgtgct ttggaaaaa | g caggagaagc | aatagcagca | ggagtcccca | gcagctggag | 420 |
| ccgcaagaat gaaccgcaa | a gagggaactg | acagcagctg | cggctgcagg | ggcaacgacg | 480 |
| agaagaagat gttgaagtg | t gtggtggtgg | gggacggtgc | cgtggggaaa | acctgcctgc | 540 |
| tgatgagcta cgccaacga | c gccttcccag | aggaatacgt | gcccactgtg | tttgaccact | 600 |
| atgcagttac tgtgactgt | g ggaggcaagc | aacacttgct | cggactgtat | gacaccgcgg | 660 |
| gacaggagga ctacaacca | g ctgaggccac | tctcctaccc | caacacggat | gtgtttttga | 720 |
| tctgcttctc tggcgtaac | c ctgactntta | cccaatgtcc | agattgatct | ccgngatgac | 780 |
| ccaaaaaacc ttggcccgn | t tgctggattg | aaaagagaaa | cctt       |            | 824 |

<210> 197

<211> 880

<212> DNA

<213> Homo sapiens

# ⟨400⟩ 197

agatatgaca ggtaggctct ttcaggctac agggagaaga cactttagag aaaatgttag 60 ggagtaatag agtggctttt tcgttttttt gcttctctgc ttatagtatt ttgttttggg 120 agggatggga tetggeettg attttgeaga gaettettgt geeeageeeg tagtatetae 180 ccaatcagac aaggagccag gaattactgc ttctgctact gatactgata atgctaatgg 240 300 agaggaggta ccacatactc aagagatttc agtgtcttgg gaaggtgaag ctgccctga gataaggaca totaagttag gocagocaga tootgoacco totaagaaga aatocaatag acteacetta ageaaaagaa agaaggaage teaagatgag aaggtggaga aaacteaagg 480 tggacatgag cacagacagg aagaccgact aaagaaaaca gttcaggatc attctcagat 540 cagggaccag cacaaaggag agataagtgg ttttggtcaa tgtctggtct gggtccagtg 600 tteetteeca aactgtggga aatggaggeg getgtgtggg aacattgace eetcagttet cccagataat tggtcctgtg atcagaacac agatgtgcag tataatcgct gtgatattcc 660 tgaggagacc tggacagggc ttgagagtga tgtggcctat gcctnctaca ttccaggatc 720 catcatctgg gccaagcaat acnggtaccc ctggtggcca ggcatgatag aatctgatcc 780 tgacttaagg ggaatatttt ctttttactt tccatcttga ttccctgccg ctaagtacca 840 tgtgaccgtt tttgganaaa cagtttntng tcatggatcc 880

<210> 198

<211> 874

<212> DNA

<213> Homo sapiens

#### <400> 198

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aaatatteat ttatgaaate tgttacetat agttgaagte ttgagtagtg aacaagggae 360 tctaatacca atactcttaa tatctggcta ttttagatcc cttaaagggc ataattattg 420 gaaatttagg tatttcacta aagcatgtat ataatattgc caacaagaaa agtaaatctg 480 aagattaagg gaacttactt ctgcaaactg tcttgcgata gttaagcaga atttaaactc 540 tgttttaagc aggaaaccag aaagattatt ttgcagttgt agaagatttc ataacttatt 600 aaaacttatt aacattttgt gttgtttaga tataggcagt tgatacatac taacatccca 660 gccttttcaa tatcagggtt aaattatagg aaaactcagt aaaatggtca aatctgaaag 720 tttgatggta gaaactgaag atttaacaga gaactgtgtt ttacccgagt gccaaaaatg 780 ctgtgagcct nettgeacaa aatttatace aetttgeatt tttatetate agteeagatg 840 gtggctccct tcttntccag gacctttcac cata 874

<210> 199

〈211〉 877

<212> DNA

<213> Homo sapiens

#### <400> 199

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aaggagaata atctcaacag actggccaaa ngcatgcaag cccnggcgcc cttttagtat 780 tctaccagca tttctttcag gaccagccag ttcanttgac cttggaataa ttcaaaatct 840 tggaggaagc aagcctcctt tgtgtanacc ntgaccc 877

<210> 200

<211> 840

<212> DNA

<213> Homo sapiens

### <400> 200

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<210> 201

<211> 674

<212> DNA

<213> Homo sapiens

# <400> 201

agtgctgagc tgttttgaca acttggaccc cgggtcctct gtgggtagga aaatcagctc cetetttget cetetgggge agetgeacet egggeeaget ttetgeetgt etgeetgeeg. 120 gcactgctgg gtcgctgtac ccaaacgcac agccggtgcc ccgtgctaga aggtcttcag 180 tttccagaag aaccaaagca tctttggacc tacctaggga aggacctgcc tgtgaccttt 240 300 gccctgtcct ggagggtcca gctttgggct gaatggcagc acccacgctg ggccgtctgg 360 tgctgaccca cctgctggtg gccctttttg gcatgggctc ctgggctgct gtgaacggga  $^{1}420$ totgggtgga gotgcotgtg gtggtaaaag accttocaga gggttggago otcocotcat acctctctgt ggttgtggcg ctgggaaacc tgggtctgct ggtggtgacc ctgtggaggc 480 540 ggctggcccc gggcaagggc gagcaggtcc ccatccaggt ggtacaggtg ctgagtgtag 600 tgggcacage cetgetgge cetetgtgge accaegtgge eccagtggea gggcagetne actotgnggo cttotaacto tggcottggt gntggcaatg gcctgttgta cototaatgt 660 actttcctgc cctt 674

<210> 202

**<211> 691** 

<212> DNA

<213> Homo sapiens

#### <400> 202

taattttett agtaaaaaga ataacagaat gcatcgtggc aatcettaag caacattate 60 tatgtggact gcttaaatca gcaaaacacc agaagtttgg ttaacttggg caatatgaca 120 agtattactt tttgggcaaa actactcatt aagcaatttc tctagtgtgt cggacacaaa 180 taggttcttt atttttggca tgtatgcctt tttattttca ttcaattttt ttttttctc 240 300 agacagacat agtagtaacg actagcattg gaaaatacat atcactattc ttggaatatt 360 tatggtcagt ctacttttta gtagaatatt tttggatagc gttgacacga tagatcttat tccatacttc tttattattg ataattttat tttcattttt tgctttcatt attatacata 420 480 ttttggtgga gaagaggttg ggcttttttg aaagagacaa aaatttatta taacactaaa

cacteetttt ttgacatatt aaageettta tteeatetet caagatatat tataaaattt 540 atttttttaa tttaagattt etgaattatt ttatettaaa ttgtgatttt aagegageta 600 ttatggtaeg gaaettttt taatgaggaa ttteatgatg atttangaat tteetett 660 ggaaaagget tneeetgnga tgaaaatgat g 691

<210> 203

<211> 714

<212> DNA

<213> Homo sapiens

#### <400> 203

gttttcattt ctaaatgcta atcetttte tttetteetg tetatgagta ggaactetet ctccatccct gtagaatctc ttggacatgt ttatctcatg cttatggggt ccccatttct 120 tggagtggga ttgacattgg tggattctgc ttcagtgtat ccttcttgcg gtcttatttg 180 catgcatgag tcaactgtgt gcatcccatt gtgctttccc caggccagtc tctcatgccc attocattte ceetgeeeta taggeeteet tteatgtact etgeecaaeg gttttggggg 300 acaatotggg ccagaagggg agcgcagctt ggcacccct gatgccagca tcctcatcag caatgtgtgc agcategggg accatgtggc ccaggagett ttteaggget cagatttggg 420 catggcagaa gaggcagaga ggcctgggga gaaagccggc cagcacagcc ccctgcgaga ggagcatgtg acctgcgtac agagcatctt ggacgaattc cttcaaacgt atggcagcct 540 cataccecte ageactgatg aggtagtaga gaagetggag gacattttee ageaggagtt 600 ttccaccct tccaggtgag gcttgaaagc cctccttgaa agaagggctg gggccttggg 660 gatgtggaga gaatactgct gccttttctt ncatanggct gtagttgggg anga-714

<210> 204

<211> 724

<212> DNA

<213> Homo sapiens

# <400> 204

| ataggcgacc | ctaatgggtt | ttgtgagatg | tegtattaag | tctgtggtcc | atagagtaat | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| gcccttcgct | gtcagggaat | gcaagggaag | agcagggaat | tccagaatgg | gaaggtgtgt | 120 |
| gaatgtagac | cttcaggttg | gtcacaaaca | gtgtctcgag | attccactgg | ggaagcgttc | 180 |
| acttttagaa | tcaggccaag | ctgagggttc | tctgtcctca | ggtattttcc | tttgtagcag | 240 |
| tcactggctc | gaaatggaga | atgagagaaa | aaggagcttg | tttcaggcca | gagacctcac | 300 |
| taaccgaata | acaacactaa | ggccctgcag | cagggggcac | aaactaccca | gcctgtttcc | 360 |
| gtgtggccta | tgatggtttt | tttgtttgtt | tgtttacatt | ttttaatggt | tggaaaaaat | 420 |
| caaaagaggc | atatctacct | atttcataac | atgataatta | taggaaattc | aaatgtgggt | 480 |
| gactataaag | ctttattgga | acacaggcac | gcccattcgt | tcctgtattg | tctatcactg | 540 |
| cttttgtgct | gcgatgacag | aggctgcatg | tggcctgcaa | agccccaaat | ttttatcatc | 600 |
| cagcccttta | cagaaagagt | ttgctggtcc | ctctcataaa | gtatcctttt | ttttaaatgt | 660 |
| gacagagtct | agctctgntg | cccagctgga | ntgcatggcg | cnatctcgct | tactgaaacc | 720 |
| tctg       |            |            |            | • •        |            | 724 |

<210> 205

<211> 853

<212> DNA

<213> Homo sapiens

# **<400> 205**

| aggatttctt | cctggtgcag | aagctggtga | gctgggctct | gtttcagggc | aaatgagggc  | 60  |
|------------|------------|------------|------------|------------|-------------|-----|
| caggagctgc | ctgtgtgact | ttggggctcc | ctctgccagt | gaccaatccc | tcttaaaaaag | 120 |
| cagtcaggtc | aatgctactg | agtagcctca | gagagaattt | cctaaacaat | acaagaaaga  | 180 |
| gaaagatagg | tctcttttcc | cttttggttc | taagcatcct | ttcctcactt | cagggtaggg  | 240 |
| tggccaagct | ctggggtctc | aatccagaag | gaggcctaag | tgggcatcag | acttaaaata  | 300 |
| ggcaggagga | agatgcggag | gagggtggca | agtagaggtg | agccattccc | cagaggaaga  | 360 |
| tgcaggggga | gggcaccctg | gggtgaaggc | cactgagagc | cagcaagtgc | ctgcggagct  | 420 |
| gacctggggg | cctctgccca | cttcctttga | cccagagttg | ccttccagta | actcagctgt  | 480 |

tcaagcccac attccctaga tttatcttgt cctctctcca tattcttctg gaaaagcaga 540
tgctctgcta atccaaggaa ttgcatcttt ccagccctgt ctcacaaaat ctgggctgtg 600
gggagagaga attgtgtgga ctgccaaggg aaaagagttt ttaaaaagag catgcccttt 660
cctcttggga ttgtagattg nattgggaac agccctgggg actagacaaa gtgctgatga 720
tgaattccct acaaggccct gttgtgaaga agtcctttgc tgggtttaat aacacctatt 780
ccctgattgg gcaatcttgc nggaagtcca cncccgtgaa attacggagc gcccctaagn 840
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<210> 206 ⋅

<211> 861

<212> DNA

<213> Homo sapiens

#### <400> 206

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<210> 207
<211> 723
<212> DNA
<213> Homo sapiens

#### <400> 207

acagcggggc gtcacctcgg acatacgaac agcgggcggt gttcccggct ccgtggggcc gtcttcccgg cgagtccgcg acggtcgccg cccacggcga gatgaaatct cgctctgtcg 120 cccaggctgg aatgcagtgg cgtgatctcg gatcactgca gcctctgcct cccgggttcg 180 ggcgattete etgeetegge etectgagta getgggatta eaggtgegtg ceaceaegea 240 cggctaattt ttgtattttt agttgagacg gggtttcacc atgttggtca ggctgttctt 300 gaacteetga cetegtgate egecegeete ggeeteecag agtgetggga tttacaggea 360 tgagccaccg cgcccggcct gtttttttt tgttggtttg tttttgagac ggagtctcgc 420 tetgtegece ageetggagt geagtggege cateteeget caetgeaage teegeeteee 540 gggttcacgc cattttcctg ccgcagcctc ccgtgtggct gggactacag gcgcccgccg gcacgcccgt caaatttttt ttttttttt tgnatttttt ggtagtgacg ggtttaccat 600 gttggccagg atggtctcga tctcctgacc tcgngatccg ccgctttgtc tccaaagagc 660 tgggattaca ggcgtgagac accgngccct gtccggcctg gtattatcat atgantgata 720 723 tct

<210> 208

**<211> 833** 

<212> DNA

<213> Homo sapiens

<400> 208

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gatccaggtc tgtcttcaga aagcaaaact atctctcaat atacctcaga aacaaagatg 180 tetecateaa gtttatacte acageaagtg etatgttett caatacettt ategaaaaat 240 gtgcacagtt ttttcagtgc cttctgcaca gaagataata ttgaacagag tatctcatat 300 cttgatcagg taacatgttt ttgtaaaaaa cagtagcata aatcatgtta tataatagaa  $^{4}360$ tgtatcaaaa ttatgagaaa aacatttgtc aaacacaagt ttgttgttta tgtagtgccc 420 ctgagactta gattttcaga gaaccttggt gattatctca tctagagata gcaagtctaa 480 cttttttgtg tggagcacct tggcctcctc attgtcccag gggctcctcc actgagagtc 540 cagccatcac tttatggatg cagaaaccca agtgccttgc tccatgtcac agatttatag 600 cagagactaa aagagccccg tcctcttaac tctttgncct ttgggatatt gaccattttc 660 ttaactattt caaggatagn tttctatttt tctaaggaaa gatttctatc ttttgatttt 720 ttttttacta agttgnccag taaccacctt ttaaaataat cacatttatt tttaattttt 780 gacaaaattt ntatatttgg catgtcacat aaggtcatat cacantggga atg 833

<210> 209

<211> 756

<212> DNA

<213> Homo sapiens

## <400>, 209

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agactcacga gttggagtga ttgatttttc tatgtattta aagaatgaag aagatattgg 660 aaataaagaa aggtatgatt ttcataagnt atttcacata ttggggtttt ttatatagct 720 ctttacaaat cattningga tccatctatt tacaag 756

<210> 210

<211> 692

<212> DNA

<213> Homo sapiens

### <400> 210

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<210> 211 .

**<211> 815** 

<212> DNA

<213> Homo sapiens

**<400> 211** 

60 totaaaatto togotacoag cacagoagto tgaagtoaaa ctaggaggat caagottggt gtggggaagg gcgtctgcca ttactgaggc ttgttttccc ctgacagcgc taaaaaggcc 120 tggaagttcg gactgggtgg agctcaacac agtgtggcaa agtggctgca gccagactgc 180 ctctctagat tcctcttcac tgggaagggc atctctgaaa gaaaggcacc agccccagtc 240 300 aaggggttat agataaaact cccatctcac tggaccagcg tatctggggg aaggggggc tgtgggcaca acttcagcgg actttaaacg ttcctgcctg ctgactctga agagagcagc 360 420 agatectgae aaggaggget eteccageae agegettgag etetgetaag ggaeagaetg cctcctcaac tgggtccctg acctccatac ctcctgatgg ggagagacct cccaacagcg 480 attgtcagac acctcatgca ggagagctct ggctggcatc agcctggtgc ccctctggga 540 caaagettee agaagaagga geaacageaa tetttgetgt tetgeageet acaetagtaa 600 tacccaggca cataaggtct ggaatggacc tncagcaaac tgcagcagac ctgcagaaga 660 720 cggcatgact ggtagaagaa aaagtacaaa cagaaagcag tacatcatca acataaggaa cccccataca gaaacaccat ncaaagatca aaggtaggta aatccataaa gatgaggacc 780 815 aaacagccaa aaaccctgna aatttccaaa ancca

<210> 212

<211> 808

<212> DNA

<213> Homo sapiens

#### <400> 212

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tgaagaatta attaaaccat atttagtaga aatgtgttca gaagttttgg gttcaagtgc 540
tggagacaaa atgaaaacta ttccacttc taatgttaca attcaacaca ggattgatga 600
actatctgca gacattgaag accagctgat tcaaaaggtc agagagtcaa agtggtttgc 660
ccttcagata gatgagtcat cagaaatctc aaatatcaca cttcttttgg gctatattcg 720
nttcattgat tatgattggc cgngatgtaa aagaagaatt attantttgc attgaaatgc 780
ctacttcaaa tactgggctt tggaaaaa 808

⟨210⟩ 213

⟨211⟩ 703

<212> DNA

<213> Homo sapiens

#### <400> 213

gttaagaage tteetgeagg gggtgagaaa ttggacteaa tgteeteetg aaaagtteag 60 ctacagaaag gctgggtccc tttggtacac tcctcacctt gatccttagc accgttgtta 120 agtatactga ttaatccaat cagtaagggc ctgcggagtg agctgggctc tggagtagat -180gtgattcaag acagaaaagc aggagggtac gccactcaga tctcaaggca cttaggatcc 240 agttaaaggt actattaaga cattatcagc tgaagagtca gactgaccta agtttaaatc 300 tgggctgagc cacaactaga ccaggctttc tcaacttcgg cacccctgac ttttttttgt 360 gtgtgtgaaa tggagtctca tctgtctccc aggctggagt gcagtggtgt gatctcggct 420 cactgcaage tetgeeteec aggittatge catteteetg cettageete etgagtaact 480 gggacaatag gcgtccgcca ccacgcctgg ctaatttttt gtatttttag tagagatggg 540 atttcaccgt gttaaccagg gtggtctcga tatcctgacc tcatgatccg ccgcctcggc 600 ctcccaaagt gttgggatta caggcgtgag cctctgtgcc agcctttttg nattttttt 660 ttttggagac agggtctggn tctattgccc angctggaat gca 703

<210> 214

<211> 758

<212> DNA

### <213≻ Homo sapiens

## <400> 214

| ttctagtaat | gtaggaacac | ttccatctaa | gccgccattt | cgatttggtc | aaccttctct | - 60  |
|------------|------------|------------|------------|------------|------------|-------|
| ttttggacaa | aacagtacct | tatctgggaa | gagctcggga | ttttcacagg | tatccagctt | 120   |
| tccagcgtct | tctggagtaa | gtcattcctc | ttcagtgcaa | acattagggt | tcacccaaac | 180   |
| ctcaagtgtt | ggaccctttt | ctggacttga | gcacacttcc | acctttgtgg | ctacctctgg | 240   |
| gccttcaagt | tcatctgtgc | tgggaaacac | aggatttagt | tttaaatcac | ccaccagtgt | 300   |
| tggggctttc | ccaagcactt | ctgcttttgg | acaagaagct | ggagaaatag | tgaactctgg | 360   |
| ttttgggaaa | acagaattca | gctttaaacc | tctggaaaat | gcagtgttca | aaccaatact | 420   |
| gggggctgaa | tctgagccag | agaaaaccca | gagccaaatt | gcttctgggt | tttttacatt | . 480 |
| ttcccaccca | attagtagtg | cacctggagg | cctggcccct | ttctcttttc | ctcaagtaac | 540   |
| aagtagttca | gctaccactt | caaattttac | cttttcaaaa | cctgttagta | gtagtaattc | 600   |
| attatctgcc | tttacccctg | ctttgtcaaa | ccaaaatgta | gaggaagaga | agagaggacc | 660   |
| taagtcaata | tttggaagtt | ctaataatag | cttcagtagc | ttccctgnat | catctgcggn | 720   |
| tttgggcgaa | cctttncagg | ctagcaaagc | aggtgtca   |            |            | 758   |

<210> 215

<211> 910

<212> DNA

<213> Homo sapiens

### <400> 215

| accaaactgc | tgttctggaa | tatgctcgca | ttgaaaaacta | gaactgccac | cctatttaat | 60  |
|------------|------------|------------|-------------|------------|------------|-----|
| actacatctg | ccaactgccc | ttcaaattta | ggttagatgt  | catttgtgat | tatcagagcc | 120 |
| tttgatctct | cattictatt | aagaaacctg | aaagacatct  | aatcatttaa | atacattctt | 180 |
| cctagattgc | tggaacttac | ggtagttata | aatcctttca  | aatgtctgat | accaagagca | 240 |
| actaactctt | acccttaaaa | ctaaaaagga | ggtcttttta  | gaagggaaaa | aatgaaggca | 300 |
| aggagcagaa | aagacctcag | ggtcactata | tacacaacat  | ggaagaacca | gggattagcg | 360 |

2 2 8 9

| ccaaagttgg | ctttgtactg | tgtcctttat | ctctttctac | cagacccaac | gcagctggct | 420  |
|------------|------------|------------|------------|------------|------------|------|
| gacatttgac | aaacaaaatg | ctgcctcttt | atttctctgc | ctttggcata | tttctgattt | 480  |
| tctattatcc | tctcctccat | taggacattg | tagttcagct | tgactttaga | ttagaaacag | 540  |
| acttgtacag | gtatagtata | cttatgaggg | cctgagaaga | ataatgtctg | agaatcattc | 600  |
| attcacttaa | ctcatgttta | ttaaatttgt | ctgctatgtg | ccaggcatca | ttctaggtgc | 660  |
| tgagaataca | gtagtgagtc | cccaaagtcc | ccagcttcta | ggaaaggaga | aagacaacga | 720  |
| acgataacaa | atagacatgt | aaatacctgg | caatgctaag | tgctttgcag | acaaatattg | :780 |
| caaatggagg | gagggtgata | tttagttagg | gagttgaacc | ttctctgnag | agatgcctta | 840  |
| gagcaaagan | cangatggac | cgagggacca | acctgggaat | tttgggcttc | ctttttaact | 900  |
| ggccctaaag |            |            |            |            |            | 910  |

**<210> 216** 

⟨211⟩ 457

<212> DNA

<213> Homo sapiens

### **<400> 216**

| aaggaaatgc  | agattaaaac | ccatttctca | cccatcagat | tgtcaggggc | ctaagagttt | 60  |
|-------------|------------|------------|------------|------------|------------|-----|
| agtaacaaac  | tctgtgatgg | ggctataagg | aaatggtgat | acttagatat | ttctggcagg | 120 |
| agattaaatt  | gttataatcc | gggtgggcat | ggtggcttat | gcctgtaatc | ccagcacttt | 180 |
| gggaggccga  | agtgtgcaga | tcacctgagg | tcatgagttc | gagaccagcc | tggccaacat | 240 |
| ggtgaaactc  | tatctctact | aaaaatacaa | aaattagaca | ggcgtggtgg | tgcactcctc | 300 |
| taatcccagc  | tactcgggag | gctgagacag | aagaatcgct | tgaacctggg | agatgaaggt | 360 |
| tgcagtgagc  | tgagatcatt | ccactgcact | ccagcctggg | cgacagcgag | actctgtctc | 420 |
| aaaaaaaaaaa | ggacaaagga | aaggagggg  | gaggnnn    |            |            | 457 |

<210> 217

**<211> 813** 

<212> DNA

### <213> Homo sapiens

### <400> 217

| taattaatta | attaaaaaaa | aaggccaggc | acagtggctc | acgcctgtaa | tcccagcact | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ttggcaggcc | aaggcaggcg | gatcacaagg | tcaggagatc | gagaccatcc | tgactaacac | 120 |
| agtgaaaccc | cgtctctact | aaaaatacaa | aaaaattagc | caggcgtggt | ggcgtgcgtc | 180 |
| tgtagttcca | gctgctgggg | aggctgaggc | aggagaatgg | cgtgaacccg | ggaggcggag | 240 |
| cttgcagtga | gccgagatcg | caccactgca | ctccagcctg | gtcgacagag | caagactgca | 300 |
| tctcaaaaaa | gaaaaaaagg | agaaaaggag | gcgggctgca | ttgaccctgt | cagagagett | 360 |
| gcagccattg | aggctgccca | atccttgggt | gctcttgtgt | gggtgtggac | acaaggaccc | 420 |
| cacccagcgc | acagccctct | gacctctgct | cacttgcccc | agtgtcccca | gttgtcctca | 480 |
| tccagggtgc | tattcgagtc | cagcctgaag | ggccggctcc | ctctctacca | cggcctgaga | 540 |
| ggaagagcat | cgttcccgct | cctatgcctg | gaaactcctg | cccgcctgaa | gtggatgcaa | 600 |
| agctgctgaa | gcggcagcag | cgaatgatca | agaaccggga | gtcagcctgc | cagtcccgga | 660 |
| gaaagaagaa | agagtatctg | canggactgg | aagctcggct | tgcaagcagt | actggctgac | 720 |
| aaccagcagc | ttcgccgana | gaatgctgcc | ttcgcggcgg | ntggaggcct | gctgctgaaa | 780 |
| acacgagcta | anttagggtc | tggaaacagg | aag        |            |            | 813 |

<210> 218

<211> 812

<212> DNA

<213> Homo sapiens

| aaattagaac | tcaagattaa | aaagcccact | caaaaccaca | caactacatg | gaaattgagc | 60   |
|------------|------------|------------|------------|------------|------------|------|
| aatctgctcc | tgaatgaatg | actcctgggt | aaataatgac | attaaggcag | aaatcaagaa | 120  |
| gttctttgaa | atcaatgaga | acaaagaaac | aatgtatcag | aacctctggg | atgcaggtaa | 180  |
| agcagtgtta | agaaggaaat | ttatagcact | aaatacccac | ataaaaaatc | tagaaagatc | 240  |
| tcgaattgac | accctaacat | cacaactaaa | agaactagag | aatgaagagc | aaacaaatcc | 300- |

cagagetage agaagacaag aagtaactaa geteagagtg gaactgaagg agataagagt catgaaaaac ccttccaaaa aaatcaatgc atcccgtagc tgttttttt ttaaaatcaa 420 480 tgaaatagac caccagcgag actaataaag aagaaaagag agaagatttc aaataaacac catcagaaac gataaagggg ataccactac tgacgccaca gaaatacaac caaccatcag 540 ataataccat aagcacctet atgcaaataa actggaaaat ctagaagaat ggataaatte 600 ctgcactcat aaacacccta caaagactga accaggaaga agttgaatcc ctgaatagac 660 720 caatacaagt cctgaaattg agcagtaata aatggcctcc aatcaaaaaa agcccagctc 780 cgatggattt acagctgatt caccagangc acaagaggcc tggaccattt gaacgattcc aacattaaaa ngagagtant cctaccatta tg 812

**<210> 219** 

<211> 769

<212> DNA

<213> Homo sapiens

#### <400> 219

gtatgttttc ttgtaagggc tttatagttt tagctcttat atttggtttt tggtctattt tgagttaatt tttgaatatg gagcaaagta aagcttttga aaactaacag atgtgcaaaa 120 ttatttttaa tttttgaata tggagcaaag taaaactttt gaaaactaat agagatttgc 180 240 aaaattattt tetttetgat titaaatget tttaaattag ataaattata tatagtteaa tgttatttct tcattgatat attactagaa atgaatgtct ggcaaagcat aagcaataac 300 atctcataag aagaggagga atactgacta atactgtata gtaatacaaa gttttgaggg 360 gcaaagagat attctcttgt tttaaataaa agttacccag agtcattgga tactctcttt 420 tctcttatgc attgattttg gccttagcaa atatggtaaa tttcttaaag tgtgaatact 480 cttgaactaa agtaataatt atcaacttag taagagtttt gttaagtggt gaaacttttc 540 ttcctcaata ttaattacta attcctgaat gataactaaa tatttcaatt agtagttcct 600 agcaaaggta gaattacaac acagtttggg aaatgctaag tagagagtcc cacagtctgg 660 720 atcigatgat accgattatg taactcantc atttacccct gagtatggat tggcataact tgatcatgat agatggcatt ttttttattg ggggagaata aatntnaaa 769 <210> 220

<211> 695

<212> DNA

<213> Homo sapiens

<400> 220

|     | taaaggactg  | tatctttggt | acactggaga | accaaatgat | gcccttcgac | attttaataa | 60   |
|-----|-------------|------------|------------|------------|------------|------------|------|
| ;   | agctcggaaa  | gatcgtgact | ggggccaaaa | tgccctttat | aatatgatag | agatctgttt | 120  |
|     | gaatccagat  | aatgaaactg | ttggaggtga | agtatttgaa | aacctggatg | gagacctggg | 180  |
|     | taattcaact  | gagaagcaag | aatctgtgca | actggcagta | agaacagcag | aaaaacttct | 240  |
|     | taaggaacta  | aaacctcaga | ctgttcaggg | tcacgtacag | cttcgcataa | tggaaaacta | 300  |
|     | ttgcttaatg  | gctaccaaac | agaaatctaa | tgttgaacaa | gcattaaata | ccttcactga | 360  |
| . ; | aatagcagca  | tctgagaagg | agcatatccc | agcgctcttg | ggaatggcaa | cggcttatat | 420  |
| į   | gatcttgaaa  | cagactccac | gagccagaaa | ccagctgaag | cgtattgcga | aaatggattg | 480  |
| į   | gaatgctatt  | gatgctgaag | agtttgagaa | gagttggctg | ctacttgctg | atatttacat | 540  |
|     | tcaatcagca  | aaatatgaca | tggcagaaga | cctgttaaaa | cggtgcctgc | gtcataatag | 600  |
| . 1 | atcttgctgc  | aaagcttatg | aatatatggg | atacattatg | gaaaaagagc | aagcatattc | -660 |
| ;   | agatgctgnc. | ttgaactatg | anatggcatg | gnaat      |            |            | 695  |

<210> 221

<211> 706

<212> DNA

<213> Homo sapiens

<400> 221

aacaaaggc cgcggcggc gggcagtgt gtcccagtct cccggtgctt ccctgaggct 60 gaggcgcccg gcctcccgcc cgccgcgctc cagatgaagt gtgagcactg cacgcgcaag 120 gaatgtagta agaaaacaaa aactgatgac caagagaatg tgtcagccga tgcaccgagt 180

ccagcccagg aaaatggaga gaagggagaa ttccacaagt tggctgatgc caagatattt ttgagcgact gcctggcatg tgacagctgt atgactgcag aggaaggagt ccaactttcc 300 cagcaaaatg ccaaggactt cttccgcgtt ctgaacctta acaagaaatg tgatacctca 360 aagcacaaag tgctggtagt gtctgtgtgt cctcaatctt tgccttattt tgctgctaaa 420 ttcaacctca gtgtaactga tgcatccaga agactctgtg gtttcctcaa aagtcttggg 480 gtgcactatg tatttgatac gacgatagct gcggatttta gtatcctgga gagtcaaaaa 540 gaattegtge gtegetateg ceageacagt gaggaggaac geaccetgee atgetgaeet 600 ctgctgtcct ggctgggtcc gatacgccga gcgggtgctg ggtcgnccca tcactgncca 660 cctntgcacc ggcaagtccc ccacaggtca tgggctcttt ggtgaa 706

<210> 222

⟨211⟩ 817

<212> DNA -

<213> Homo sapiens

#### **<400> 222**

tgtttagtat gaaaagtatg ttttcatttt gcagatcctt ttctctctgc tccataaaat gttatataaa acattetett tatttetgtt aattttgata gtatgetaet gtaetaaage 120 tgaacaatat aagtattgtc ccttctgttt atagacatgt ataggacacc ttcagcaggc 180 240 aaggeettat eetagggeea ggaatgtgaa gatgaatgag etaaccaage eecacetege tgcccacaat ggggccaccg ctcactacta agtctaagcc ctcagagatt tgccttggta 300 ttaagaaatg catcagaggc atgcctaact tgaaccaaag caagcatctg ttcttattta 360 aacctagtaa ttgtttcttt acaaattgtg gagaaactta ggacaaatga acctcaaact 420 agatggtttg gagcaaatag catggaagta atttgaagac catattctct tcattgtcac 480 attgacattc accetgtaaa atcatgatac tettttetge catagaacca tttettaaat 540 tcgcatttca tgattgtaag gtggtggtct cactgacact tgtcatggtg ggttggtgga 600 gaggaccggg ggtgggaatc acggcagacc cagtctgtct gcaacagcgg agcctttgga 660 720 gggtgctcaa ggaaacactg gtagaaatgg anggaccaac tgaaggaaaa ttttgaattc aaaattgaag agtttggntc tgggttccca taatatgctt gataggagaa gcaacctttg 780

### naactggctg ggaaatcgga atacatnttg gaggtct

817

<210> 223

<211> 747

<212> DNA

<213> Homo sapiens

### <400> 223

attgattcat ttaatctgca tgttggcggt gtgaatagta gaaaactcac agttgaaaat gcctcttgtc agccacggag cgcacaggca tttgtgtgcg taaccccggg tagcgttcat 120 180 gtgcacctaa agtgtgacga cagcctatgg gaaaccaagg gaagggtcac ctgtagaggt ccggacattc ggttttgcct ttaagacaac tattanatcc taagcgactg tgttgtggct 240 gagttaaaaa tgtgcctgtt tacttgcaga gcttcttcca ttaggtgaac aatctgttgt 300 gattttaatg tgtaagacct ttggtaatgt gaggaattga ttagatagtg cagcccagtc 360 tctagaggat cagatctgtg ggattggttg gggtggttgg gcaaagtcca tggtgagtta 420 480 nnaaatgact ttggaagtga ctctaatgtg tacacnaaca acacacaagc acacaccaca catacataca cacacgaaca catacctcca tgctgcatat acacacacag gcatacacac 540 600 actetaatgi giacacanac neacatgeac ataccacaca tacacacaca cacatgaaca 660 cataceteca tgccacacag acacacacag gcatacacat actetaatgt gtcacaacac acatgcacac accacacag aactencaca tteatgceae atatacacac aeggneatae 720 747 acacatgcag gcacatacac tacacan

<210> 224

<211> 857

<212> DNA

<213> Homo sapiens

<400> 224

tccaatattg actgggatga ttgttgcaca tatctgaatg tatcaaaaat gattagcttc

60

aactaaatgg gttaattata tactatgtaa attatatata aataaatttg tataaaaata taaatgaaac tattgcctgc aagtagttcc agaaagaagt tgacacattt caagaataac 180 aaatgttatt aaacatgtga aattgatgaa tgagaaaata tactatttcc atactcttcc 240 ttaaagatgt atcagtccct aatgtatatt cctattatgg tgatattatt tatgctcagt 300 caatcattaa catatgctta tgaaaatctt attttactta aagaggaata ctttaaataa 360 attitattea attgeettag aatttaggee taeteetaga caggaagaaa gattteeaag 420 aatteacaat ettetaaaac eattacetat atttattatt tatgetetta cataaceete agtagcacat tatttttctt gtacaattga tcagatatta tttgaaatta aagtgtctgt 540 ccctttcagt cagcgtgttt ctaaaatatg acaactaatg aaatcgcata gtaaatgcta 600 caaactaaag gctataataa gttgtaacac tttttcagaa tcacaataaa atttttctgg 660 atatgetgnt gtgtaaggaa tteeteagtg atatgtgeat ttgaaettea getaatattt ctattetete tgagtttggg aagttatttg aatteeeeta ettetanggt tittatttat .780 accettaata tteatggttt ttgncettte taaggtatat tttaaccgat ttatteacte 840 antggtgggg ttctatt 857

<210> 225

<211> 635

<212> DNA

<213> Homo sapiens

#### <400> 225

gggaccccag gcttcctctg agacatccac cagcggtgat gggttgggac caatctcccc 60 cactcctctc caccctagca gtctgctacc gctgccacgg cccccctgc tgccccggct 120 ggggagggtg gnccncctgc acccctcca aacctcacca gtaacaggag actgnagcag 180 acccaggccc aggtggatga ggtggtggac atcatgaggg tgaacgtgga caaggtcctg 240 nagcgagacc agaagctgnc ggagctggac gaccgtgcag atgcactcca ngcgggggcc 300 ttccagtttg aaacaagcgc agccaagctc aagcgcaaat actggtggaa aaacctcaag 360 atgatgatca tcttgggagt gatttgcgcc atcatcctca tcatcatcat aggtgagtan 420 ggtgagaatg gccggggccc tttccctgga gaggtttccc cagtggattc taggttttga 480

aggicattaa tetagitnit aetetteage caaaaacaca tatagetget aatggeaatt 540 etgatteate tagageeaaa aaetitgatg tiatitanee tgeatittge etagitettg 600 geagtettgn taacattigg aaatangaaa getgg 635

⟨210⟩ 226

<211> 698

<212> DNA

<213> Homo sapiens

<400> 226

atccaaatgc attagtctta gatgaacaca cctggaatct cacttttatg agaatttcat agactatact cttgaattcc agttgtacat ttttgcttgc aaacacaggc atttcagagt 120 ataatgagag gaggctggtg ctcataaaga agactgactt tacagtaaac cacctcccag 180 gagaactgaa gatggggctt gagctgaggt ggggtctctt ctccactatc ccgagcagca 240 cctgggcccc aggtcttcac ctagacagtc aaggacctca gcctaaacag catccagctc 300 ttagaagtcc tgtgaaattg ggccaggcac tgtgggtcac gcctgtaatc ccagcattta 360 gaaggagget geggeaggtg gateaettga ggeeaggagt tegagaeeag eetggeeaae 420 atggcgaaac cccgtctcta ctaaaaatac aaaaattagc tgggtgtgat ggtgcatgcc 480 cgtaatccca gctattgagg agactgaggc aggagaattg cttgaacccg ggaggtggag 540 gtagcagtga gccaagatgg cgccactgca ctccagcctg ggcgacagag cgagacccca 600 tctcaaaaaa aagaanagaa aaaagaanag aanaaaaaag atttcttgta aaattgaaaa 660 698 caaaattcag actttggcta cttgaatctt ggttaatg

<210> 227

**<211> 819** .

<212> DNA

<213> Homo sapiens

| tactagatgg | acaggctgag | gtgtttggca | gtgatgatga | ccacattcag | tttgtgcaga | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| aaaagccacc | acgtgagaat | ggccataagc | agataagtag | cagttcaact | ggatgtctct | 120 |
| cttctccaaa | tgctacagta | caaagcccta | agcatgagtg | gaaaatcgtt | gcttcagaaa | 180 |
| agacttcaaa | taacacttac | ttgtgcctgg | ctgtgctgga | tggtatattc | tgtgtcattt | 240 |
| ttcttcatgg | gagaaacagc | ccacagagct | caccaacaag | tactccaaaa | ctaagtaaga | 300 |
| gtttaagctt | tgagatgcaa | caagatgagc | taatcgaaaa | gcccatgtct | cctatgcagt | 360 |
| acgcacgatc | tggtctggga | acagcagaga | tgaatggcaa | actcatagct | gcaggtggct | 420 |
| ataacagaga | ggaatgtctt | cgaacagtcg | aatgctataa | tccacataca | gatcactggt | 480 |
| cctttcttgc | tcccatgaga | acaccaagag | cccgatttca | aatggctgta | ctcatgggcc | 540 |
| agctctatgt | ggtaggtgga | tcaaatggcc | actcagatga | cctgagttgt | ggagagatgt | 600 |
| atgattcaaa | catagatgac | tggattcctg | ttccagaatt | gagaactaac | cgttgtaatg | 660 |
| caggaatgtg | tgctctgatc | catatggtca | aaaaggactg | aaaaattgtg | atggatttga | 720 |
| tcctgtacaa | agttgtggac | nagctggccc | ctcttaacat | tcggagaccc | agtctgcagt | 780 |
| ctgtgagcct | tggcgggtat | ttgncataat | cggngtgca  |            |            | 819 |

<210> 228

<211> 816

<212> DNA

<213> Homo sapiens

| aggaagtcat | gccatacagg | aagccatcag | aagttgcctg | gtaaggattt | aagaaaaaag | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| gaattaagtg | gttatttggg | tcataaattt | tagggcatca | ggttatgggt | atctgatgta | 120 |
| tttatattaa | taattacagc | ttaccatggg | ccagtcactc | ttttaaatgc | cacagcaaat | 180 |
| ttatgaagta | ggatatatta | ttatcctcat | ttgcacatga | ggaaactgtg | cacaaagacg | 240 |
| ttaaatggac | tgccaaaaat | cctaaagcta | gtaagtgcca | gtaccagtat | tcaaacctag | 300 |
| gcagtctagc | tcttaaccgc | tatactatat | cttccattga | aatggacagc | tggttatttt | 360 |
| gactaaatat | cctaagatat | gtttggaagg | gaattaccat | cactgacctc | ttaaatctcc | 420 |
| tttttctgta | cttccaagct | gatcaactct | ttttttgtga | aagactcaaa | ttgttgtgtt | 480 |

gtattacatg aatcgatata tgggataatt gctaaacatt atagacctga gagtcattct 540 atctctttta gaaatctttt tctttattcc ataatggata atgacaaatt caaaagcttt 600 aggaagtagg cagataacat aagtgaggga gatggcttgg tataagtcaa tttgaaatgg 660 cgagaactgt ggcaaaccac tactcactcg tcacttggct tcagctgctc tgtgcaaatg 720 tggatccaat ggtatcagat atttaaggnc aggaatggng gcttatgcct ataatcccag 780 cactttgga ngccaggtgg gaggatgctt gaccta

<210> 229

**<211> 772** 

<212> DNA

<213> Homo sapiens

#### <400> 229

ggatttggga taagtctaaa acttcagact taaagctttg aagcatgtta actgcatgaa atattaaaca tttcgaactt ctttagcctt tgtcattttg tgacccaggt ttttcatagt ctgctctatg tctcctgctt ttccttgttt tgctaatcat cctccttgag ctccactgtt 180 ttcactctgg gcatccaatc cagcctttca tggtgtgtgc ttcatcaggc ccctggttca 240 catgetgagt geettataag eetggeeage aetagtatat teteattaac aaacaaacag 300 tcagcttcgt ttgggagggt gcttcacttt caaagctacc cagtataatg catacaatgc 360 agtacaagcg gaactcactc agaagtagca cctgagcttc aaatagactc tcctgatcat 420 tctactgagt aagattctcc acatttaaga atcaatacag gatttacttg cgaggatagt 480 gtataaaaat ggaatagttt ttctatttct ggactgaaac caaactcctc atatctaatt 540 gtagttattc aacattatca gaatccctat ttattttggc agaacagaca aaaggacgtg 600 gaatgtactt tctgctacag ccgttacagt caactagatt tgagtgctgc cgctggtaag ttaattgaat agccaagtta tggtgcctta cccaagtaga cagtggaaag gaataatggc · 720 agangccatg atgcgagtct gggcacagcc atgcatccca tctgnggnga tc 772

<210> 230

**<211> 818** 

<212> DNA

<213≻ Homo sapiens

## <400> 230

| aacatttata | gctttaaaaa  | taccttacgt | acttcaataa | ctatgtggaa | gcactaagaa | 60  |
|------------|-------------|------------|------------|------------|------------|-----|
| agattctgta | taaaacatcg  | caagtttgga | aaaaatacat | ctttacatct | tttcctccag | 120 |
| cttcattttc | tcagaggcag  | gagcaggcca | gtggtttcca | tactgcggct | cctctaggag | 180 |
| ccacctgaga | accaaaccac  | caatccagca | tctcccaccc | catcatccag | atcctcccga | 240 |
| tgccctctca | tatgtgggtt  | ctgtgaccca | gaagcctcca | taatgaacca | caggagaaca | 300 |
| ccatgggcca | gccaacagtt  | aggctcttca | cataccaaat | aaaccaccac | aggaaccctt | 360 |
| aacctcatct | actgcctgat  | ccaaacatca | ctgctttgaa | ctcaatggtc | tttcttgagc | 420 |
| ctttatgatc | aatacatagt  | gcacttttag | tccctctgaa | gcagattatg | ttgtcacaat | 480 |
| tatgactcaa | ctttaatagt  | ttcaaccaga | aactgtttag | gatccaacat | acaagagagt | 540 |
| caactacatt | tcataatatt  | agcccattta | agagtatttt | tcaaagtgtg | ttctgtggat | 600 |
| gttaataggt | gatactgttc  | cagaagttct | gtggcaaact | aatccaggac | ttctcagaac | 660 |
| ctttaatata | tgnttcatat  | acatttacat | ttcangcctc | tgaaaggcag | aatcctcaaa | 720 |
| tttatttatc | catggaagct: | ttttttccct | canagcaact | tacaggacta | ctttgggaaa | 780 |
| cactggctaa | gggtcctaag  | anctcatgaa | anccctta   |            |            | 818 |

<210> 231

<211> 899

<212> DNA

<213≻ Homo sapiens

### ⟨400⟩ 231

| tcggttaaaa gccagaagtt atgagcttca ggaaagcaat gtacggctga agttaacca | at 60  |
|--|--------|
| tgttgacacc gtgggatttg gagaccagat aaataaagat gacagctata agccgatag | gt 120 |
| agaatatatt gatgcccagt tcgaggccta cctgcaagag gaattgaaga ttaaacgt  | tc 180 |
| tetetteaac taccatgaca egaggateca tgcetgcete tactttattg eccetactg | gg 240 |

acattcacta aagtccctgg atctggtcac catgaaaaag ctggacagta aggtgaacat 300 cattccaata attgcaaaag ctgacaccat tgccaagaat gaactgcaca aattcgagag 360 taagatcatg agtgaactgg tcagcaatgg ggtccagata tatcagtttc ccactgatga 420 agaaacggtg gcagagatta acgcaacaat gagtgtccat ctcccatttg cagtggttgg 480 cagcaccgaa gaggtgaaga ttggcaacaa gatggcaaag gccaggcagt acccctgggg 540 tgtggtgcag gttgagaatg aaaatcattg cgattttgtg aaacttcgag agatgctgat 600 ccgcgtgaac atggaggact tgcgagagca gactcacacc cgccactatg aattgtaccg 660 acgetgtaag ettgaagaga tggggtteaa ggacaetgae eetgacagea aaccetteag 720 tottoaggag acatatgaag caaaaaggaa tgaattootg ggagaactgo agaagaaaga 780 agaagaaatg agacaatgtt ggtatgagag tgaaggagaa agaactgact taagaggcan 840 899 aggaagactt acgagaagtt gacctttaag cggcccccag aagaaagaag aagggagca

<210> 232

<211> 846

<212> DNA

<213> Homo sapiens

#### <400> 232

gctcaaatat attatgctct ctcttgactc tgtgcctttg caagtgacat tcacttggcc 60 tgaacactgt tccagctccc tctgttcttt ccaggtgatg ccttctcgcc ttccaaatct cagtttagac gtgctctict ctgggaagtt tattcattta ctgtgtgtta gatgttgttc  $^{180}$ 240 taggccctgg ggatgtagca gagaagaaga caaagtcact gcatttggtg aggagctgtc atetteagaa teaaaaette eecetagtge agtgteeace teeagataet getteattte 300 360 totgototot tigitoatga aactititoa ataatigoti titoattioi toatotooag 420 tttttatcta attccaattt agtttctctc tccatgactc tgctcacact gatttttctc 480 agacaccaac ttttttttgc cgcctaatac aatcgccatg ttttttcttc atgttatttg 540 atcettttag tggcactggg cataaatgac cacacgttte ttttcgaaac attatcatga 600 cttttctgat gccacattct cctggctttt cttttgcccc acaggaattc ctgtagacat 66.0 ccactgcctt actagatgta gggagcacct cagggcccag ccctggccca ctcctctt

tagccctcat actiticcta agtggtacca tetgggccct tgcttgaaat gccaaatggc 720 attaaatgcc aaaaggatat etteageeea actitigntit aaceeeagea aetggatggc 780 cagateetti tieneetta atggataagg attaaggaat eatatgagga tgettaaace 840 aaagtn

<210> 233

**<211> 719** 

<212> DNA

<213> Homo sapiens

#### <400> 233

ccgcgctgtc cgccgccgct gcctgagtcg actctgcgcc gcccgccgcg atggaggccg 60 ccgcccagtt cttcgtcgag agcccggacg tggtctacgg ccccgaggcc atcgaggcgc 120 aatacgagta ccggacgacg cgcgtcagcc gcgagggtgg cgttctcaag gtgcacccca 180 cgtccacgcg cttcaccttc cggaccgccc ggcaggtgcc ccggctcggg gtcatgcttg 240 300 tcggctgggg cgggaacaac ggctccacac tcaccgccgc ggtgctggcc aatcgactgc 360 gtttgtcctg gcccacgcgc agcggccgca aggaggccaa ctactacggc tcgctgactc 420 aggoggeac cgtgagcctg ggcctggacg ccgagggcca ggaggtgttc gtacccttca 480 gegeggtget geecatggtg gegeecaacg acetegtgtt egatggetgg gacatetegt 540 cgctgaacct ggccgaggcg atgcggcgcg cgaaggtgct ggactggggg ctgcaggagc 600 aactgtggcc gcacatggag gccctgcggc cccggcttct gtttacatcc ccgaattcat 660 cgcggcaacc agagcgcgcg cgcggacaac ctnatccaag ctcgcgtgcg cagcaactgg 719 acagatccgc agggacatcc ganactttcc ggtctancgc gggctggaca aaagtcata

<210> 234

**<211> 772** 

<212> DNA

<213> Homo sapiens

#### <400> 234

ttgcggggag ggcccgaggt cgctgtgtcc ggggcagagc ggccggttcg tcccgagtct 60 gcgctctttc gggtccgctg ctgtgtcccg gtccgctctc ctcagcatga gcggccggta 120 ggagtgaggt ttcatcggtt ccctcgcact ggaggaggca gcggccgctt cggcagcgac 180 agctatggcg gtagagacgc gggcagagct ggtgggtaag cggttcctgt gtgtggcggt 240 cggcgacgag gcacgttcgg agcgctggga gagcggacgc ggctggcgaa gctggcgagc 300 gggggtcatc cgagccgtgt cacacaggga cagccgcaat ccggacctgg cggtgtatgt 360 ggaatttgat gatcttgaat gggataaacg agagtgggtt aaagtttatg aagatttttc 420 aactttcttg gtggaatacc acttaatctg ggccaaaagg aatgacccta gccagactca .480 gggatcaaag agcaaacaga ttcagtggcc tgcattgact ttcaaacctc tggttgaaag 540 600 aaatataccc agttcagtca ctgcagtaga attccttgta gataagcaac tggatttttt aactgaagat agtgcctttc agccctacca ggacgacata gacagnctaa acccagttct 660 canggacaac ccgcacttca tgaggaantg aaagtctggg taaaggaaca aaagggtcag 720 gagattttta tgcaaggtcc ttattcctta aatggatccn gantgagagt tt 772

<210> 235

<211> 714

<212> DNA .

<213> Homo sapiens

| aaataaaagc | atattttgag | ggaataaaga | agcagaaaaa | caaagaagaa | tctggggaag  | 60  |
|------------|------------|------------|------------|------------|-------------|-----|
| atgggcataa | atctccacca | agtgctgcca | aggcttccca | ggcgaggctg | ctgaaaaagac | 120 |
| cctgtggagg | tagagggaca | atttgtcatg | gatgggaatg | ggcttgaggg | ccgggaagca  | 180 |
| gggcatgatg | gggcctcatt | catcattttc | ccgttatccc | agcggcgtgc | aggggagcag  | 240 |
| gtacagcacc | tgccaagtga | gtgaccagag | ggggactggg | aatggaaagg | acctcaagga  | 300 |
| aggacaagct | gagctctggg | aggccacctc | ctccaggaag | ccttccctga | ttcatccttc  | 360 |
| acaggcagtc | tcaatttgca | gtcagatatc | cactgctctg | attcttagat | cggcaagtat  | 420 |
| ctccctaccc | agactgcagg | ctctgctggg | gccgcggctg | tttctgactt | gtgcacaatg  | 480 |

gcatcctgt acctagcaca ggactgagtc cagagaaagt gctcagtgat gcttgttggc 540 cttgctctcc tctgtgggca gcactggaca gggcacccgg cgggtcctga nggtgtggac 600 atcccacggc agagcctgcg gttgatcccg accatgaacc aaggcctggg gcgggggtgg 660 ccacatcagg ccactttttg ccaggaaana tgtggcttgn naacctgggg gtct 714

<210> 236

<211> 636

<212> DNA

<213> Homo sapiens

<400> 236

aacgtaatga aacctcgtct ctacaataag tagaaaaatt agccatgtgt ggtagtgcat .60 gcctgtggtc ccaggtactt gggaggctga ggcagcagga tcacttggac ctgaggggtc 120 gaggetgeag teagecetga ttgetgeeac tgeacteeag tetgggeaac agagaagaet 180 gtctcaaaac aaaaacaaca ttactcagga atgaaggaaa tggtggaatt gagaagacgg 240 gactaaagcc aattaatggg gtatggcaat agtctagttg gaagaggtta aggtcatgca 300 gtaggacata atagggetga agaagtatgg atggaattga caaactttta aagggtagaa 360 ttcacaagat ttgatgaaca aatgcatgta agagaacata tacaatgcat tgtaagggac 420 ttactgctat aattaaccat tgtatgtttc caaaatgtat gtgtataaat agtcaacagt 480 gataacagga tccaatcatg gacaaccagt ttgattggat ataaattttg aaagaaagtg 540 tgtgtgtgtt tgtgtgtgt tatgtgtgaa tgtgtctggg gaagttaaga aaaattttga 600 gtttgnccta ttgatggcaa gcanctgcng caggga 636

<210> 237

<211> 703

<212> DNA

<213> Homo sapiens

tetgtegetg acteegegee gegegeegae egegegeeeg eecageegge catgeaegea 60 gtgccgcgcg gctttggcaa gaaagtgcgt gtgggcgtgc agtcctgtcc cagccccttc 120 tegggeeagg egtgeeceea geceteetee gtgttetggt etetgetgaa gaacetgeee 180 ttcctggaac acctcgagct gattgggtcc aacttctcct ccgccatgcc ccgcaacgag 240 cccgccatcc gcaactcgct cccaccctgc agccgcgcac agagtgtcgg ggactcggag 300 gtggccgcca tcggccagct ggccttcctg cggcacctga cgctcgcaca gctgcccagc 360 420 gtccttacgg gctccgggct ggtcaatatc ggcccgcagt gccagcagtt gcggtccctg 480 tegetggeea acctgggeat gatggggaag gtggtgtaca tgeeegeget eteagacatg 540 ttgaagcact gcaagcggct gagggacctc aggctggagc agccctactt cagcgccaac 600 gcccagttct tccaggcgct gagccagtgc ccctcgctga gcgcctgtgc ctggnctctc geageggeae cetheaacce gatgeegtge tggeetteat ggettgettg cetgeaggtt 660 703 ggcatgtgcc accttgttca ccggggaagn cccttgncac ctg

<210>-238

⟨211⟩ 791

<212> DNA

<213> Homo sapiens

#### <400> 238

tgggcagcag cagaagcagc agcagcagct ccagcttctt ccctccctcc ccaaggagaa 60 gagtteecte etectectee teetgettet eetgeteaga gtteetgeet eeagetgeea 120 ggggggacag ccagccagca gcaggaggg ggctagagag ctgaaggaga gccagtttcc 180 ccaaaattgc tgcagtgaga agaggagttt gttactttaa acagaggctg aagaaactat 240 agaattagca gagaaagtgg agaaggtaga ggatggagtt gcagactcta caggaggctc 300 ttaaagtgga aattcaggtt caccagaaac tggttgctca aatgaagcag gatccacaga 360 atgctgactt aaagaaacag cttcatgaac tccaagccaa aatcacagct ttgagtgaga 420 480 aacagaaaag agtagttgaa cagctacgga agaacctgat agtaaagcaa gaacaaccgg 540 acaagtteca aatacageca ttgecacaat etgaaaacaa actacaaaca geacageage 600 aaccactaca gcaactacaa caacagcagc agtaccacca ccaccacgcc cagcagtcag

ctgcagcete teccaacetg actgetteae agaagaetgt aactacaget tetatgatta 660 ccacaaagae actacetete gtettgaaag cagcaactge gaccatgeet geetetgtgg 720 tggccanaga cetaceattg etatggtgan eegeettaae agteanaage tgggeteaae 780 acttgatgtg e

₹210> 239

<211> 797 --

<212> DNA

<213> Homo sapiens

<400> 239

| gataccctta | agggagaact | ctggagcact | aactgtgtgt | tccctacaga | tgcgtccacc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| acctccccg  | ccggctaaag | ccccggatcc | tggccaccca | gatcccctca | cctgaaggcc | 120 |
| agggaagcct | tgacccccag | tgatgctgct | gtccctatct | tcaagctgtc | agaccacacc | 180 |
| atcaatgatc | cagagcaaca | cagccaaaag | ctggaatcgc | ccttatttcc | accctcacct | 240 |
| ccaagggtgg | aaacttgccc | cttcccattt | ctagagctgg | aacccactcc | ttttttccc  | 300 |
| attgttctat | catctctagg | accggaacta | ccttctcttc | tgtcatgacc | ctatctaggg | 360 |
| tggcgaaatg | cctgaaatct | ctggggctgg | aaaccatcca | tcaaggtctc | tagtagttct | 420 |
| ggcccacctc | tttccccacc | ctggctccat | gacccacccc | actctggatg | ccagggtcac | 480 |
| tggggttggg | ctggggagag | gaacaggcct | tgggaatcag | gagctggagc | caggatgcga | 540 |
| agcagctgta | atggtctgag | cggatttatt | gacaatgaat | aaagggcacg | aaggccaggc | 600 |
| cagggcctgg | gcctcttgtg | ctaagagggc | anggggccta | cgggctattg | ctttangggc | 660 |
| ccaccacggg | caggggcctg | ttccagctgc | cacgctctat | catatggagc | gaggtgttgg | 720 |
| ggaaggcngg | gcaagcaagc | ctgttgangc | aggggaagga | gaagagactg | agggctttga | 78Ô |
| cctttctgag | gccccan    |            |            |            | •          | 797 |

<210> 240

<211> 771

<212> DNA

### <213≻ Homo sapiens

### <400> 240

| attagcttaa | atgttacggc | cacttaaaaa | ttctacatat | gactattgtt | taaatacatt | - 60 |
|------------|------------|------------|------------|------------|------------|------|
| tttcatgtct | ctgatgtagt | ccttatttga | cataagtatt | ttattcactg | cttaattgtt | 120  |
| agatagatta | tagacagctg | ttactaagta | atactgctcc | attagggcag | aaacagaaac | 180  |
| tttattttaa | ttaaatgtgt | actaatgttt | gagtttctat | attttgctac | agtgataatt | 240  |
| ccagtaaaat | aaactgtagg | cctctagttg | ttttagaatt | ttaaaactgt | aaatggactc | 300  |
| agagaatcag | tttcttatta | gacgtcatga | gagtatattt | ttttcattat | gctttaagag | 360  |
| ggaatttgta | acttgctcag | gtaacattca | agttttctgg | tttgtgtttg | tccctacaat | 420  |
| taaacacact | gaactaacag | gaaaaggtta | catacattta | ggaacaattg | cacttttaaa | 480  |
| gggagagaat | gcatagttgc | tcacatatct | cagtgtcagt | cacctaacat | ggatcagtgc | 540  |
| tttatttgag | attacaaaac | tagaaaatga | cggagtcaag | gctaggacca | atattctgtt | 600  |
| cagtcttaga | taattataga | atacacatta | aaatcagata | tttgaatttt | cttaattttg | 660  |
| taactatttg | gcattgaaag | gagatactaa | aaaaattata | tatcgcctag | aaagtncatg | 720  |
| aactaataat | gcatttctaa | aggtgaaaaa | ngaataggna | tttttctggt | t          | 771  |

<210> 241

<211> 686

<212> DNA

<213≻ Homo sapiens

| aagacctctt | agaccagctc | ttgtccatca | tttgctgaag | tggaccaact | agttccccag | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tagggggtct | ccctggcaa  | ttcttgatcg | gcgtttggac | atctcagatc | gcttccaatg | 120 |
| aagatggcct | tgccttgggg | tcctgcttgt | ttcataatca | tctaactatg | ggacaaggtt | 180 |
| gtgccggcag | ctctggggga | aggagcacgg | ggctgatcaa | gccatccagg | aaacactgga | 240 |
| ggacttgtcc | agccttgaaa | gaactctagt | ggtttctgaa | tctagcccac | ttggcggtaa | 300 |
| gcatgatgca | acttctgcaa | cttctgctgg | ggcttttggg | gccaggtggc | tacttatttc | 360 |

ttttagggga ttgtcaggag gtgaccactc tcacggtgaa ataccaagtg tcagaggaag 420
tgccatctgg tacagtgatc gggaagctgt cccaggaact gggccgggag gagaggcgga 480
ggcaagctgg ggccgccttc caggtgttgc agctgcctca ggcgctcccc attcaggtgg 540
actctgagga aggcttgctc agcacaggca ggcggctgga tcgagagcag ctatgccgac 600
agtgggatcc ctgcctggnt tcctttgatg ngcttgccac angggatttg gctctgatcc 660
atgtggagat ccaagtgctt ggacat 686

<210> 242

<211> '726

<212> DNA

<213> Homo sapiens

#### <400> 242

aagatgaaca agagccgcca gcgcgtgcgc tacgactcct ccaaccaggt caagggcaag 60 cccgacctga acacggcgct gcccgtgcgc cagacggcgt ccatcttcaa gcagccggtg accaagatta ccaaccacc cagcaacaag gtcaagagcg acccgcagaa ggcggtggac 180 240 cagccgcgcc agctcttctg ggagaagaag ctgagcgcc tgaacgcctt cgacattgct gaggagctgg tcaagaccat ggacctcccc aagggcctgc agggggtggg acctggctgc 300 acggatgaga cgctgctgtc ggccatcgcc agcgccctgc acactagcac catgcccatc 360 acgggacage teteggeege egtggagaag aacceeggeg tatggeteaa caccaegeag 420 cccctgtgca aagccttcat ggtgaccgac gaggacatca ggaagcagga agagctggtg 480 540 cagcaggtgc ggaagcggct ggaggaggcg ctgatggccg acatgctggc gcacgtggag gagctggccc gtgacgggga ggcgccgntg gacaaggcct gcgctgagga cgacgacgag 600 660 gaagacgagg aggaggagga ggaggagccc gacccggacc cggagatgga gcacgtctag 720 ggcagaagcc cttgccnaga agcccgtgct tgccttgctg gagcccgnct tgcanacccg 726 gtcctt

<210> ·243

<211> 756

### <212> DNA

### <213> Homo sapiens

### <400> 243

| aagccattca | acaaatctct | aggaagttcc | atactttccc | acattttcct            | gtcttcttct | 60  |
|------------|------------|------------|------------|-----------------------|------------|-----|
| gagccctcca | aactgttcca | tcctctgcct | gttacccagt | tccaaagctg            | ctttcacatt | 120 |
| ttcgggtgtc | tttttagcag | taccccactc | tcggtaccaa | tttactgtat            | ttgtctgtta | 180 |
| ttatgctgct | gataaagaca | tacctgagac | tgggcaattt | aacaaaagaa            | agaggtttaa | 240 |
| ttggacttaa | cagttccatg | tggctgggga | ggcctcaaaa | ttatggcgga            | aggtgaaagg | 300 |
| cacatttcac | atggcagcag | acaagagaag | agagcttgtg | cagggaaatt            | ccgtttttta | 360 |
| aaacaatcag | atctcttgag | acttagtatc | acgagaacag | cacaggaaag            | acatgcctcc | 420 |
| atgattcaat | tccctcccac | aacacatgga | aattcaagat | gagatgtggg            | tggggaatac | 480 |
| agccaaatca | tatcaatttc | taagcaacat | atttggatat | ttactctgga            | aatgtagtta | 540 |
| caaatgagca | gttccaaata | gaagagtgca | atttacttca | gctttgcaca            | aaagcaggta | 600 |
| aagaggtatg | cctatatttt | gaggctagaa | caactagaat | atcatatttc            | ttttcttagt | 660 |
| ggtgatagga | aagcctactt | tcctggacca | gagaagcaga | tgtaagtagc            | cttangaatt | 720 |
| gctgngcttt | ttctgctgnc | agtcccctgc | tcatga     | to the control of the |            | 756 |

<210> 244

<211> 820

<212> DNA

<213> Homo sapiens

### <400> 244

ttttgcttga ggccttgaag catgcattct cagggtacgt cctaccccta caagtcctac 60 tgacttctta atcagtaatt ccggctgggc acggtgggtc acgcctgtaa tcccagcact 120 ttgggaggct gaggcagggg atcacctgag gtcaggagtt tgagaccagc ctggccaaca 180 tggtgaaacc ccgtctctac taaaaataca aaattagccg ggcatggggg cgcatgcctg 240 taatcccagc tacttgggag gctgaggcag gagaatggct tggacccggg aagcggaggt 300

tgcagtgagc cgagatcgtg ccatcgcact gcagcctggg tgacaagaac aaaacttcat 360 ctcaaaaaaa aaaaaaaaaa aaatcagtaa ttctagattg gccctagggt gcttttagca ttggaaacct aatgcacaaa gtgatggtta tattggactg atctgtaatt cactgttttc 480 tgttattatt ctatctctta atcttaggct aaagtaaata atgccagcct gattggactg 540 600 ggttatactc agaccettcg accaggtaag taaaggaatt agtaacagag gggttgaggt ggaaggtgat agagaaaaca atgaaaataa cctgcagaac aacctgtagt cactgtaagt 660 tgatttggac cattttgtaa catttggttg ttcagacaga aaacaataca gatcaaatac 720 ttttgcatta aaaaagtatg natttctgac tataatgngg cactttggcc tttgagtttg 780 gttgatcact cattgcctta accctgaact ttanagaaag 820

<210> 245

<211> 763

<212> DNA

<213> Homo sapiens

### <400> 245

60 gctctgcttt gtaagcagga accgcagtcc cctgaggagg gtgtgtgaag actcgctcat ttgagttctt tgaaatgggt cccttggtcc tgctgtcaca ttgccttgag ctaacggatc 120 ctgttcccat cataggccgg tccttggggc attgggcagg tgggggcttt gtgcctctgt ggctgctgct gtctgttctc taacaggcag aactgtggga ttctgaactc aggatgtgca 240 gctctccaga ctgagacccc aaggctgact ccaggtggat ccattgtctc tttattctca 300 ttacgattta tcagaaaagt gagacaaatt caggattctc aaatgctgag gcagcccgg 360 420 aattgggggg atctttctgt tgttagtcca cccatatttt caagcaggca ttaaaggaag gtcagccact gcgcctagaa taagtaggtc aggcctgctc catccattgt ccccggcccc 480 gcaccetect cetgagaaga etgtggetee tgacaegtet agagaggaag ggeeeeggge 540 600 tgctgagcga acacagtatg aagattgctt actgatccaa atgtccattt tattgcatgt 660 ttggtacttt ttttggtana tgtaatggaa gattctctta tcacatccat tccctctgac 720 attagttttg agttaattga gattctttaa gcgttaacct ggggaangta agtctttatc 763 ttncattaga cattttaaat ttaagaatct aagnaaaaca cca

<210> 246

⟨211⟩ 836

<212> DNA

⟨213⟩ Homo sapiens

### <400> 246

| attaaaatga | gaaatacata | agatgataaa | taaaatgaag | gtgaaggtat | tccagatcta | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ccgaaaagat | tttcagtatc | acagattatt | cataagaaat | tgagaaaagg | aacaatcaga | 120 |
| agttgcaaaa | gatggtatag | ccgaatataa | tggaaatagg | aaaaattagt | cgaaaataaa | 180 |
| ggttgattta | gaaatgaaga | aaatgaatat | atttcttaat | acaaaataag | tgggaaatga | 240 |
| gaagttatac | caataaaaag | catttacaaa | tttaggggat | attgtaaccc | agtataattt | 300 |
| tctgacaggt | tggactttga | ccctaatgga | cttactggtg | aactttttca | aatgtttaaa | 360 |
| taatgtctat | ccatgtatca | tgaaggacag | tatgcttcaa | attgtctttt | gaggcagaca | 420 |
| tgttctcagt | actaaaagac | atttttagaa | ggattttatt | ctcaacagat | gcaaaatgca | 480 |
| aaataaaata | ttgacaaaca | atacagcaac | aaataattta | ctatcactca | ggattataag | 540 |
| gctggtgtta | agcagaacag | ccattaaatc | agcatcaaaa | gaacaaatag | taaaatccaa | 600 |
| agtattaatt | acagataact | tttcaaaaat | tcatcattca | cccttgattt | aattatttct | 660 |
| ctggcaatta | tttaatagac | ttctcggagt | ctggtaagtc | ttaaaccaag | aactccatta | 720 |
| ttcctactgg | gaaaacttaa | catttctcaa | gtggaagtaa | acatgttgca | ctattttata | 780 |
| tatggttaag | agcctgtatt | gcataaagcc | annticccaa | atgagganat | aggaag     | 836 |

<210> 247

<211> 680

<212> DNA

<213> Homo sapiens

<400> 247

agagacccat gcattaatat cattattaat tccatgcatt aatatcatta ttaattctat 60

gcattaatgt tattaattcc atgaatgtgg caggtatttt tttaacattt attgtaggct cagctgtcta ctgggtgttc tgagaaaata caaggaagct atagtaatgc agtgtataca 180 tacattettt cetgeatatt aggaacetat agtetaattg gggatgtaag ettteaegea 240 tgaaaagaca ggtaaatgta gaagacaatt tcttatgagt ttcagtgagt catgcagaca gtactggagg agttcacagg tggaagggga tgcagggaat gagagttatg gagaggaact 360 aggagatcag gaaagtcttt ctgggggagt gaagatttga ctggacttta aaaaatgggt 480 aaaagaaggo aggatttota gtagggaato ttagaaacac aaggacacaa agaacatgca 540. tggaccattt gagggatggt gaagaaatca ccccaactgg aataaatgtg ttgggtagtg ggagatgaat ctaggaaggt ggtttggagt tatattttga aggatcttgn tgggtgaagt 600 660 aaggatccat ggacttgctc tttggagcag gagagagtaa ttaaaatatt ttaagcagcn naatgatgca tcagattcag 680

<210> 248

<211> 826

<212> DNA

<213> Homo sapiens

#### <400> 248

attaagatgt ggccttacat atggcattcc ttgtgttcgt aatgtgagat ttttgattta 60 gataaatcaa gattcaggat taaagtttca ttgtaagttg aaatagaaaa tgtattaaaa 120 tgtctaggct tctgggagga agttcttata ctcttctttc ttggcattag aaagaagcaa 180 tatgaatttt tgtgaatatt ctaaatattc aggcaacact gttcagattg atttaggttt 240 300 gtcttaacca atgttctttt tttagaattt caggtagtgg cattcactga gtatgcagct actatggttt ttgtatggga cgtataaata cttgattata tacgacagat tttaatgtct 360 ttaaagactt cctgctgtat taacatattg taatggagtc ttttaaatac taggttgaat . 420 ttaattgaag tcacacacat cttgaagtgg taactgcata gtaaatacta ccaagagttt 480 540 ttttcacgtg ggagtatcct aaaactctgc catgggtgta aatgttttac attaatttca 600 taattggaca gaccctgcat ttagcgaaaa cattttgttt tgaaagtgtg ttctttttgt 660 cgcactgtta ctgcgtaaca cttctcaaca ttctgtaagt taaattattt taaaataact

atggtgaatt catgtttatt ttttttactt tgaaaattgt agtactcang tggtatttaa 720
tggggaaagg atcctttggg tataaatcat aatgnatttt aaggaatgca tctattacca 780
ttgataacct ttaaccttaa aaaaaaangg nctaattaat tccctt 826

<210> 249

<211> 779

<212> DNA

<213> Homo sapiens

#### <400> 249

ttgcctttta aatagcaata aacatggtgt aattggttta ggaaggctgt gctccatgga 60 gaagagctgg tactacattt aatttatctt gtagcatagt gttttctcaa actatgctta 120 gaagaatact ggttcctcga ggtgttgatt ggtgttgtct ggaaatacaa ggagcttctg 180 aggccaagta atgtggcaaa cactggggta ggccagttac ctggggttaa ctttccggca 240 ggacttctca gagtctttaa tatgctactc tgcatcataa attttcaaga gcttgccctg 300 tacctatttg tctttccctt ttcatagtgc tcacagggtt tcatggatct cagcatagaa 360 aaggetgett tagggtagag geagetgeea geagtettta gaaagtgagt gatttetatt 420 tcagaaaggt aacactgagc acctgggaag gaaaacgcca aggatgagaa actagaccca 480 aggcaaccta taatgaggct gttaaaattt tctaggcaca agaaaatgag gctcagaatt 540 agggcagtga aaatgtgagg gaagagatag aattgagaga tgcttaggag gtagaatgga 600 tactccataa ccacaaggat ggtgaatgag agaataaaat agttgaaggt gaatcccaag tttctagctg ggaagcttgg acagagaagt gttgggtaga agatgaaaaa caatttaatt 720 tgggacatac ngataaagat ggcaactcat anccagcaac tggtgatact aatgaanca 779

<210> 250

<211> 799

<212> DNA

<213> Homo sapiens

## <400> 250

| agagacgcca | gaggtgcagc | tccagcagca | atggcagtga | cggcgttggc | ggcgcggacg | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tggcttggcg | tgtggggcgt | gaggaccatg | caagcccgag | gcttcggctc | ggatcagtcc | 120 |
| gagaatgtcg | accggggcgc | gggctccatc | cgggaagccg | gtggggcctt | cggaaagaga | 180 |
| gagcaggctg | aagaggaacg | atatttccgg | tgaggctcac | cgggtcccaa | gtccagccct | 240 |
| ggatctccca | atggccttcc | aatccttaaa | ctgccaatcg | cccacccgt  | tcctacctgg | 300 |
| tgccttgggc | gccccatccc | ccaacagaac | tcccgggccc | caatccagta | taccctaacc | 360 |
| cttgatgtcc | cgaccgttgc | cacgtatagg | gcactcccag | ttacctgcac | aacagtttca | 420 |
| ggcccccaaa | ccgtttccac | cggcgggtct | ccaaaacaac | ccacggctca | actcctcctt | 480 |
| tatcattacc | atctcccgcg | tggagttctc | ctcaggtcgt | gcgaaacacc | cccagattct | 540 |
| tcgcacagtg | tctagatccg | accgcccaac | gtttgcctcc | cagcctgact | ccctcggccc | 600 |
| ttacccacct | gtcaccccct | ctacgctctc | cttcctcgcc | agcacgcctt | agctttgcaa | 660 |
| gcctgcatgc | attcangctt | ctcagtgttt | ctagaccccc | gacttcgcaa | gagtgangat | 720 |
| gatgggaact | ggtcatggga | actacttatg | gntggacacc | atcttctaaa | ggctttggcc | 780 |
| tatnaaccca | actaaactg  |            | •          |            |            | 799 |

⟨210⟩ 251

<211> 758

<212> DNA

<213> Homo sapiens

| tttttggagg | tttatttcat | tgtttgccct | tgatactgta | gtctttcctc | aactatctga | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tgattctcag | acaactcatt | atttaagagc | taaggcttcc | tgggagcttt | gcatatatgg | 120 |
| acaggettat | tgacggatat | attttgtttt | aggatggctg | ggtgaacagc | caaatcttag | 180 |
| ctggggtcct | acaaattccg | gaattgtgag | gagtttgctc | ttctcaccag | tgtccatagc | 240 |
| aactagtgta | gttctcagtt | tgttcagctt | ctttagggaa | gaaccttatc | tttttctttt | 300 |
| tttcatggag | tgtaaataac | tgccaatgtt | gtggggctgg | tggcagaatt | gacgcttcta | 360 |
| attattcaac | acttcaccct | tctgatttca | aaccctctga | ctgctgttta | acattgttcc | 420 |

cgccttctct gagtctgaag cctctgaatc tgaagggacc aaacaaacct cttgactatt 480 acaggttgta gcttatttct ttctgcttca ctcttcctta tatattttgt tttgtacaag 540 tttctagaaa tctttcatca cctcatggcc tgtttctctt ttcttccttg ntaagggttt 600 atacgtttta taatatttta tttttaatga tttcagtaag gtttcttgtc aaagtggatt 660 tattgaattg gaattccagc atatttatca ttaagctgag aagggaaaaa tgcagggctt 720 taccagtaga atgtcttctt aantganggn ccatgggt

<210> 252

<211> 786

<212> DNA

<213> Homo sapiens

### **<400> 252**

| agcgcgaccc | gacagcctgg | gaaacggaca | gccgtgtcag | aagggcaggt | gccagtgggc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| aggaggccgg | agagaaagcc | gcagcttcct | tccacctcgc | gccgggcccg | cggccgcgca | 120 |
| cggggaccgc | tccgagttcc | tcccggcggg | aacccccgc  | cccagaactt | tggtctcgtc | 180 |
| ccacccaccc | ccgcccgcgc | catggtctcg | ccctagggag | ccatcgataa | ctctacgctc | 240 |
| ggcctcgatc | gactcgctcc | ggctcccctc | gccgtcctgg | acacggcgga | gtgcggagcc | 300 |
| gcccgtaaga | tgctctgacc | tttgaccctg | ccgttcagct | ctagggcccg | tgcaggccac | 360 |
| accatgaaca | cctcccagg  | cacggtgggc | agtgacccgg | tcatcctggc | cactgcaggc | 420 |
| tacgaccaca | ccgtgcgctt | ctggcaggcc | cacagcggca | tctgcacccg | gacggtgcag | 480 |
| caccaggact | ccgtgaatgc | cttggaggtc | acaccggacc | gcagcatgat | tgctgctgca | 540 |
| ggttaccagc | acatccgcat | gtatgatctc | aactccaata | accctaaccc | catcatcagc | 600 |
| tacgacggcg | tcaacaagaa | catcgcgtct | gtgggcttnc | acgaagacgg | ccgctggatg | 660 |
| tacacgggcc | ggcgaaggac | tggacaagcc | aggatcttgg | gaacctcagg | tncccggaac | 720 |
| ctgcaatggc | caaccggatc | tttcangtga | acgcaaccca | nttaacttgg | gtgtgccttg | 780 |
| aacccg     | ÷          | . :        |            |            |            | 786 |

**<210> 253** 

<211> 805

<212≥ DNA

<213≻ Homo sapiens

<400> 253

| tttatatata | aggaatgcaa | ttacctctca | aaatttatga | gaacaaactc | aagtccatag | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| aaacctctgg | agctgagcat | cctcagttca | aatgctggct | ctgccactta | ccagctgcat | 120 |
| gatcttgggc | aagttaatct | gcctcaaggc | tttggcaaga | tcaaagggtt | gctatgacct | 180 |
| gatgcacaca | tggtacctga | cttcaggtag | gtactgagtg | catgtcactg | gtggcagatt | 240 |
| gcattgccca | aaggcgtctg | aacaattaaa | gatgtcccag | acctcctgct | ctaacaacat | 300 |
| gactgacatt | gctctcactg | agaggtggcg | tctatgttcc | tcccgtttaa | tctgggaaga | 360 |
| gaggagttcc | caggctaggt | catagaaggt | gatgcaggtt | ccactcagct | cacctgtgct | 420 |
| cactccctct | tettttttt  | cctctctctc | tctctccc   | tccaactccc | catacctctg | 480 |
| tctctctctg | ctcacccttg | aatgcagcta | ccatgctgtg | aggaaacctg | gactaggcca | 540 |
| gctggaaaga | ggacatggac | aggcctattt | ggggaggagc | tgagtgaggc | cccagtgaca | 600 |
| gcaaacatca | gttgtcagat | gtgcaatgga | tgagccttca | gcaggctctg | ctgtgccctt | 660 |
| ttcaaatgca | tatttattat | gcagccagag | ttggcagcaa | gcactaagct | gtgacagtgc | 720 |
| aagtaattta | attggtgang | cccattcttg | caactacctc | tgngactagt | ggagacaact | 780 |
| tagatcccag | atnaagggat | ggggg      |            |            |            | 805 |

<210> 254

<211> 749

<212> DNA

<213> Homo sapiens

<400> 254

catatttgtg taaaatttta ctgctttcat ttgtttttct ttaaatagac catctttaat 60 atatatgcat tcttttttt tttaaaaaaa agaagcattt taaaaaagga aacatttccc 120 ttattatctt gtcacttgcc aaaaatagaa ggtaacttaa aaataaatgc aatcaaacca 180

aaacgatgcc attacattct agctagagtt gtatcataat atctcacaaa agagattgtg aagcagagca gatgtgttaa aacggagatg ttctacttgg tgtgtcaagg atttaaagac 300 ttggaaaaga aagaattatc tcactatgta agttaatatc atttgacaac ctcacctatc 360 aaattaccta taaaccaccc tatgtcatct tatgggccac tgctggtaag agtcccagac 420 attgggaaac aacgtggtca gaaactttca acatgaagct ttcaatatga tcaagctgga 480 tggttgcggg tgggagaggt atgaagcagt catcaaacaa gacatgcttt ttggctgaaa 540 ttcagtggta tttttgttac caggattctt agttttcaga atgaggtacc aaatgtattt 600 ttgcaatgtt ttaattccct tccttaggta attcttagtg acttatttgg gcaacattag 660 720 tgttgctata tagaataagt ttcattttag atgacgtggn ctttctgntc tggtgngctc ttcgaatgac ccattaagca cattctagg 749

<210> 255

<211> 790

<212> DNA

<213> Homo sapiens

#### <400> 255

agtettttte eccetecett actettegte eccgetecet eccetecea eccettteet 60 tctagctccg acgtttgcgg ccgcgggggc ggcggaggat atggagtaaa gccagagtca 120 180 gtggccaggc acgaaggcag agcaggaaca gccaggaggc gtttattagg ggggcggggg 240. gaaagagccc cagcaccgcc cctcctggaa gaaggaagag gaagtggcag tttttgtctt 300 tgataaaaaa ctgattgaca agtatcaaaa atttgaaaag gatcaaatca ttgattctct 360 aaaacgagga gtccaacagt taactcggct tcgacaccct cgacttctta ctgtccagca 420 tcctttanaa gaatccaggg attgcttggc attttgtaca gaaccagttt ttgccagttt 480 agccaatgtt cttggtaact gggaaaatct accttcccct atatctccag acattaagga 540 ttataaactt tatgatgtag aaaccaaata tggtttgctt caggtttctg aaggattgtc attettgeat ageagtgtga aaatggtgea tggaaatate acteetgaaa atataatttt 600 660 gaataaaagt ggagcctgga aaataatggg ttttgatttt tgtgtatcat caaccaatcc ttctgaacaa gagcctaaat ttccttgtaa gaatgggacc caaatttacc ttcattgngt 720

| cttncaaatc | ctgaatattt | ggctnctgaa | tacatacttt   | ctgtgaactt | gtgaaacagc | · 780 |
|------------|------------|------------|--|------------|------------|-------|
| cagtgatatg |            |            |  |            | •          | 790   |
|            |            |            |  |            |            |       |
| <210> 256  |            |            |  |            |            |       |
| <211> 788  |            |            | e de la companya de l |            |            |       |
| <212> DNA  |            |            |  |            |            |       |
| <213> Homo | sapiens    |            |  | • •        |            | •     |
| ,          | •          |            |  |            |            | -     |
| <400> 256  |            |            |  |            |            |       |
| ctaaatatag | ttccctcctc | gggacaacaa | agaagccatc   | ctctgaatga | ctgcattccc | 60    |
| catggccagc | ttctgggctg | tttgtcagat | tccccagca  | ggatgggagg | gaggagtggg | 120   |
| ggcaaacagg | agtggccagg | gctggagagg | agctgctgaa   | gtccatgcag | cagggtgctg | 180   |
| tcttccagcc | atatgacatt | tgggcccaga | cgctcagtgg   | ctatggcctt | gaccgtgagt | 240   |
| tcctgccttc | tgtctctggg | gatgcatggg | gcccagagcc   | ctgtcccggg | caggtgctac | 300   |
| taagttgtga | ctgaagaaga | ggagagagaa | atggtgatct   | ccccagcagg | aaatgaaaag | 360   |
| tgtctgtcgg | ctccagtcca | gtcaagctgg | gtgacctctg   | ggcagattct | atccttaagt | 420   |
| ctcagtttcc | acatctgtga | agtagggata | aggactatgt   | caaggagact | agagagaaat | 480   |
| tgtgccaggt | ggcgggcact | agtggtccta | tctggccagg   | gctctgtgcc | tgcatgtgat | 540   |
| ggattgcagg | catagccttt | gaagtgcttt | ttgatgtgcc   | tttcacttca | ggatggagtc | 600   |
| cctcttctgg | tcccagggct | aagaggtaga | tagaggccct   | gcaaggtact | cattccttac | 660   |
| taaaacaaga | ccccaagccc | agagcccctg | ccttccttcc   | agcctcttat | ttctgatctc | 720   |
| aacttctcag | ncatccagag | cccanttggg | tgctgangcc   | ccctttaaaa | agccccagag | 780   |
| ccccccg    |            |            |  |            |            | 7,88  |
|            |            |            |  |            |            |       |
| <210> 257  |            |            |  | • • • • •  |            |       |
| <211> 800  |            |            |  |            |            |       |
| (212) DNA  | · ·        | * .        |  | •          |            | •     |

<213≻ Homo sapiens

## <400> 257

| acaaaaatac | ctggaaaaaa | tatgggttat | tactgaggaa | atgtacgagt | attccaaggt | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ccgctcatgg | ggcaaacagc | ttctccataa | ccaccaagcc | actaatatga | tagcattact | 120 |
| cacaggggcc | ttggtgactg | gagtagataa | aggatctaaa | gcaaatatat | ggaaacaggc | 180 |
| tgtagtggat | gtcatggaaa | agacaatgtt | tctattgagt | catattgttg | atggttcttt | 240 |
| ggatgaaggt | gtggcctatg | gaagctacac | agctaaatcc | gtcacacagt | atgtttttct | 300 |
| ggcccagcgc | cattttaata | tcaacaactt | ggataataac | tggttaaaga | tgcacttttg | 360 |
| gttctattat | gccacccttt | tacctggctt | ccaaagaact | gtgggtatag | cagattccaa | 420 |
| ttataattgg | ttttatggtc | cagaaagcca | gctagttttc | ttggataagt | tcatcttaaa | 480 |
| gaatggagct | ggaaattggt | tagctcagca | aattagaaag | caccgaccta | aagatggacc | 540 |
| gatggttcct | tcaactgccc | aaaggtggag | tactcttcac | actgaataca | tctggtatga | 600 |
| tccccagctc | acaccacagc | cacctgctga | ttatggtact | gcaaaaatac | acacattccc | 660 |
| taactggggt | gtggttactt | atggggctgg | gttgccaaac | acacagacca | acacctttgg | 720 |
| tcttttaaat | ctgggaactg | gggggacnag | ctgtgtatga | catagtcatt | ttcagncata | 780 |
| ttcctggatt | gacgggtttn |            |            |            |            | 800 |

<210> 258 ·

<211> 770

<212> DNA

<213> Homo sapiens

| ttgcgtacct | attgcggttc | cttcacgaaa | tttcattctg | cttgcttctc | tgttggtctg | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ttgccacgca | caacttaaaa | tatcagatgg | ctattagctg | ttgcattcat | gatgattaag | 120 |
| caaggataat | tctagcatat | ttttttctcc | atgtaagtga | gttgctcttg | ccctgagtt  | 180 |
| gggccacaat | ttaaaacaca | agcaaataat | cagcaccgta | gaaaacaagg | attcatacac | 240 |
| tccctcccca | gcccctttc  | aaggcaaaat | tgagtcttcc | aaacatttat | acagcgctct | 300 |
| gatttagaag | gtcaataaag | ttcgttgtcc | ttcagtcaag | ccatggcttt | ataaaagttt | 360 |
| gatttcagat | aaattcattc | taatacagct | ttttttctta | aagatttttc | ccccaaaaaa | 420 |

aactacaaag aaaagaaatt ataaaaatgt gaacccaaga cctacccatg ttaactcagc 480 tgtccagcca tagcaaagtg gacaagagtt tcaaatgaat cagccatacc cactgtaatg 540 tttacaatta tgaaattaaa tcacaccacg ttcctatgat gcaactatat ctcccaatga 600 ggcaacgccc ctcagttaca ctgacaccat cattcacatt tggttattga tttcccttgt 660 gctaacgact aatgccaagc tatcctataa gcaggtncca ggtcaatttt ctttctttgg 720 atcgttaagg atggaaaacc atcggagact gnatcctcgn agtatgtctt 770

<210> 259

⟨211⟩ 763

<212> DNA

<213> Homo sapiens

### <400> 259

tgttagcgtg cacagitetg catacitget teceeteace tgccaggaac aggitagtgt 60 tececattet geacactite tteeteteae etgeegggat catgttageg tacaccatte 120 tgcacacttt cttcctctgt gtacgtgtgt gtggttttcc tttcagaaat gggtcatact 180 ctgtggacat ctttttccac ttaaagtgat ggcacagcca ttttcccagt caagtaacat 240 gaatgtacaa gtttagcaaa cttcctcctg agagatggag agatcaaggc ttctgctccg 300 tggcagccat ccgtgcacat gcatcactgt gcgtgagttg gtcccagtgg cttgctgaga 360 catgctctgc acaggggaga tttcttatac cagcagtgtg ggaggcagtg gggcaggtag 420 agccacaagt ggggatgagg gagcagagtc tagggcaggc tcctggatgg acaccagcta 480 cactgtctat tggatgtggg acttccctca ctgatgaaat gaataagaga atcttcctca 540 tcctgctgtt gttggcgtta aaacgggtta atgcatgaaa gcaacaaagc ccggcctgca 600 gacagcactt ggtaagtete etetteeeag catgtteaae aggaageeet catteeetet 660 agaatgtagg agtcttgcca gcantggctg tttggtctct ggctgttgcc gacctgatga 720 gaacctaaaa atggggnctt ctggatagat tnccttctta ttg 763

<210> 260

<211> 707

<212> DNA

## <213> Homo sapiens

### <400> 260

| tacaaccatc | cattcctctg | cccttcctcc | attcatccac | ccatccctct | gtctattctt | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ccattctttc | ctccatccac | ctattcaccc | atacaacctt | ccatccccc  | atccatccaa | 120 |
| acatccatcc | atccactgaa | caaatccatg | gcactgcccc | actggccttc | ttttatttcc | 180 |
| tctgtgaacc | ccttctctcc | tacctctgag | ccttcacgta | cttcccctcc | cattcccata | 240 |
| tacaccccta | gggaatacct | actcagctta | agaaaagcct | cacctaaatc | ccagtctgaa | 300 |
| gtaggtcctc | ctgctattcc | tctcctgaag | aacctcattc | cctccttttc | gacagttgtc | 360 |
| atagacatca | ccaaacgttt | gcttttgggt | tgatttactt | attcctgtct | ccctgaccag | 420 |
| actggaagct | ccaagagggc | aggcattagg | tcttccttca | gtgcctaccc | cagagcctac | 480 |
| ctggcccaca | gtaggggctc | catagggaag | tggtgaatgc | tggcattgag | tgaacttaga | 540 |
| aagtactgtg | tgcagggcac | aggcccagat | gtcttgtcag | gatttgcttc | tgaatgtgac | 600 |
| tgcctctcaa | ggcttagcat | ctatagaaag | agataaagaa | tgtgtatgca | ggattgcaat | 660 |
| gcangatgcg | actcaggaag | gaggcangga | gggatggcat | ttnggag    |            | 707 |

<210> 261

**<211>** 795

<212> DNA

<213≻ Homo sapiens

| atataccccc | cttcccccat | gttcctttat | ctcaatgaat | ggcctcagta | atcctgaaac | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| caaggtcggc | tgcatcttct | tcctccctgc | accctccagg | agcaatccat | cagtaagtcc | 120 |
| tatcagcgtg | acaccgtgaa | tgcctctcct | cctcgcttcc | ttccagttgc | ccctgcctgg | 180 |
| tcacaggcct | catcctccct | ctctggccca | attggatgcc | ctctgcttgc | ttgcctcgtc | 240 |
| tctgactgta | tcctgtgggt | gacatgcatg | catacccggt | accacttaaa | cccccatgg  | 300 |
| gctccagggg | cccacttgt  | ggtgtaccaa | gccactctat | cccttggcc  | ctgtgtccct | 360 |

| tccttttcct | ctcttgctcc | agccttactt | gtaattcctc | agttcacacc | tccatcatgt | 420 |
|------------|------------|------------|------------|------------|------------|-----|
| ctgtgagtct | caagatctcc | tagcccttct | ccagacctgt | tcaagacacc | cctagccctt | 480 |
| ctccagacct | gttcaagaca | cccctagccc | ttctccagac | ctgttcaagt | gcccctttca | 540 |
| tcactcccca | tgtgcagttc | catagttgtc | catttcacat | tgacttccat | gtatctggag | 600 |
| ggcaggagcc | agctctgacc | caccttgcca | ttcccagagt | accctctcag | tgaatgtgga | 660 |
| tgggtccccc | tgccttggta | ataagtcatg | tgattgagca | gatggtgtga | cttgcccctc | 720 |
| ttgcttggaa | ngtcatctgc | ccagaacttg | tgaangtgca | gtggcctgag | ccaggctttc | 780 |
| aagaggacaa | ccggn      |            |            |            |            | 795 |

<210> 262

<211> 328

<212> DNA

<213> Homo sapiens

<400> 262

| agaaagatgt | gactactttt | gacaacgcct | caaacttttc | taaccataaa | agtaattata | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ctggtgagaa | atcctagaaa | tctgaagagt | gagataaagc | ctttaaatgg | ttgtcacact | 120 |
| tcattgtagg | taagataatt | catactggag | aaaacgccta | catgtgtgaa | caatatggca | 180 |
| aaacttaatg | ctcacacttt | attgctagga | aagcatttat | acttgagata | aattatacaa | 240 |
| atataaagac | tgtgaaaaag | ccatcattat | ctgctcacat | tttactcaac | accagagagt | 300 |
| tcctgcttaa | taaaagcatt | ataagtgc   |            |            |            | 328 |

<210> 263

<211> 879

<212> DNA

<213> Homo sapiens

<400> 263

gcatcattcc tttaattgag cagagttaac tggatcaaat tatttatggg agagagga 60

| aaagttataa | agaattatag | taatttttaa | tttccaccaa | tatactcttt | gtaagtgaat | 120  |
|------------|------------|------------|------------|------------|------------|------|
| çactctataa | ttactttctg | ttgcactgaa | tgcagcaaca | ataacacaat | agtatttaa  | 180  |
| ggcactggtt | tttggcatac | tctaaccttg | taattattta | aataacagcc | aagtttactc | 240  |
| atgtttttga | ttctgtcaag | aaaaaaaaaa | agttccttta | ctcgaaagtg | atggccgaaa | 300  |
| cagaatcgga | aatttgtttt | cttgaaatta | cataaataca | cagaaaatgg | cacttattag | 360  |
| cttttgttaa | aacattacct | tacctaatca | ctgcataaaa | gtccagattt | gtagaaaatt | 420  |
| gtaattttct | cagtatctaa | aactattttg | ctttccatta | agtttctatt | tgctattttc | 480  |
| tcagaatttt | acaattaaag | ataaatcaca | aactgtttgt | ttttcttaaa | gttctttgag | 540  |
| aaaatgtcta | attatacaat | ccttggacaa | tactgtgttt | ttttggtgct | gtgttttta  | 600  |
| agaagtccta | cttactggaa | ttttgactat | ttggatattt | ttgtttttaa | aaggggaggg | 660  |
| gaatttgctt | aatacttcta | aagatgtgaa | ttgataattg | atattaaaat | agaattactc | .720 |
| tcaactcacc | agaattaaat | tttatatctg | catatttaac | actattagct | catataaatt | 780  |
| ataagaaaaa | ttttcaaagg | actgggttta | attttttgga | tatgaaatga | attgcctttc | 840  |
| tgcctttctt | aagactattt | tgnacctata | ttgcactac  |            |            | 879  |

<210> 264

<211> 693

<212> DNA

<213≻ Homo sapiens

| acactgcgcc g | cggctgcgc | agtacacggg. | aggcttttaa | ttccattgtg | gagaggacgg | 60  |
|--------------|-----------|-------------|------------|------------|------------|-----|
| cgttattttt a | ttaactgga | ggcgacggcg  | gctgcggcgg | cggcgggacc | cgcctcctcc | 120 |
| ggggtatgaa a | atcggcagt | gggttcctga  | gtggcggcgg | aggtaccggc | agtagcggtg | 180 |
| gtagcggctc c | ggcggcggt | ggtagtggcg  | gcggcggcgg | cggcggcagc | agcggcagga | 240 |
| gggcagagat g | gaacccacc | tttccccagg  | gtatggttat | gttcaaccac | cgtcttcccc | 300 |
| cggtcaccag c | ttcacccgg | ccggcggggt  | cggccgcccc | tccccgcaa  | tgcgtgttat | 360 |
| cctcctctac c | tccgcagcc | ccggccgctg  | agccccccc  | tccgcagccc | cggacatgac | 420 |
| tttcaagaag g | agccggcgg | cgtcagccgc  | ggccttcccc | tcgcagagga | cctcctgggg | 480 |

gttcttgcag tctttggtta gcatcaaaca ggagaaaccc gcggatcctg aggagcagca 540 gtcccaccac caccatcacc accaccat tggggggctg ttcgctggag ctgaaggag 600 gtctccaggc ctaggaggcg gtgaaggggg gagtcacggc gtcatccagg acctcagtat 660 tctncaccag catgtccagc ancaaccagn cca 693

<210> 265

<211> 809

<212> DNA

<213> Homo sapiens

#### <400> 265

totgggtgat ottggcaaac taacttotga gottotgtgo attataggca ttoagcacat attegttgga tgaaaaatac ttttettgaa agtttatgaa gttgtaggat geecageage 120 eccettteet ctattteett cetettgaag caagegttga etatacetet tteectaace 180 cttagtgtac catagettet tecaacetet etecaateca ttaetttttt etgagetace 240 ctgtctcaaa tctaactcag gcctttttgc aagaggaagt ttaagccatt gtttactcat 300 taactcactt gacccttaga acaatcgtgg gaggtgttta tttcggaaag gaagctaaag 360 cacaggacag aaaaataagg tcatagcgtg aactagtaag tagcagaact gggaacatag 420 gactgttatt ttcaaacact ctaaacttca ctgcagttgc aaatttgcaa ccaaaatggc 480 cgccttgaaa gggtcttttg cagtaaaatc tcagtgtcca acatcaaaga cagttcttca gggcetecaa ttaactatac atcetgeece cagetgetea tetetgeace tetaacaegt 600 acttcacaga gtaggaaatt gggctttctc cttcaaaaag aaaagtagag aaggcctgag 660 720 ggcagtgtaa ttaaaatggg agaagtagag accacgaatt acttggatga attcataact gggtggtctc tgaggcangg attattattt ttcctggatt ttaagcntaa aagtagtgat ttttgcattg gtaccaaaaa caaaatngc 809

<210> 266

<211> 800

<212> DNA

## <213> Homo sapiens

# <400> 266

| aacaggcacc | gctgcgggga | ctggagtcgg | cggagaaaac | cggggtcccc | agcgctgggg | , 60 |
|------------|------------|------------|------------|------------|------------|------|
| cccgcggcgc | catggctcac | gtcggctccc | gcaagcgctc | gaggagtcgc | agccggtccc | 120  |
| ggggacgggg | gtcggaaaag | agaaagaaga | agagcaggaa | agacacctcg | aggaactgct | 180  |
| cggcctccac | atcccaaggt | cgcaaggcca | gcacggcccc | tggggcggag | ggtgaggacc | 240  |
| acaggcatcg | gggagaggag | gcgcagttac | tacccgggga | agtcgggcga | gcagtggtcg | 300  |
| gggacgctca | gtcatgcctc | tgtgcagccg | ggcctgagat | gtgagggcca | ggcgccgcag | 360  |
| gagccaggaa | ggggctcctc | tgggaagctc | catctctgtt | ctggaaagcc | cctcaggaag | 420  |
| cgctcaccct | gtagccggcc | tgtgcctgcc | ccaggccaga | gcaggggacg | aaggtttacc | 480  |
| tcttcccctc | ctggctttcc | agcctcacct | tctccctgca | tcacagagag | aagcaagcag | 540  |
| aaggcccgga | ggagaacaag | atccagctcc | tcctcctctt | cttccagttc | ttctagctcc | 600  |
| tcttcttcct | cctcgtcctc | ctcctcttcc | tccagtgatg | gccggaagaa | gcgggggaag | 660  |
| tacaaggaca | agaggaggaa | gaagaagaag | aagaggaaga | agctgaagaa | gaagggcaag | 720  |
| gagaagcgga | agcacagcag | gtggangctt | ttgccgggcc | ccttngttgg | accagtggca | 780  |
| ccgatcaact | tgggnaggaa |            |            |            |            | 800  |

<210> 267

<211> 829

<212> DNA

<213> Homo sapiens

# <400> 267

| agctggcgtc agggacttcc | tcgggctccc | taaggacctg | ctctcccagt | tctctactct | 60  |
|-----------------------|------------|------------|------------|------------|-----|
| tccctctgag gcagaggctg | ggcaggaccc | acaggcagcc | cttagtgacc | cgcactccac | 120 |
| accetgtetg cettaggaga | aatggggtct | gtgaatctgg | gctctccctc | catgctgccg | 180 |
| tgtctgcgga gccaggtgcc | ggcgtggcct | ctgctagcca | gcagagtgag | catgcacagc | 240 |
| tggtccaggg cacggtgttt | tgtttgcact | gttccagaca | tcgtcatctc | catctgatga | 300 |

tgatcactcg gcagctttga gccctggcac agcttcgggt cgaagcacgt tcccttttca ggagagttga gccgagcttt ccttcacgca gacttaattt cctggactta gtgctaacgt 420 caagaccaaa cctgtaggaa aagagcttta actacacaaa cacatactga cagattcagc 480 caaactccga gagtcccaga ccggagcctg tgtccctagc gcaggtgtgt ctgtcgggca 540 gccgacggtg cctgtgcagg cagtggctgg acaccactac tcccttctct tccctcctg 600 cttgatcgcg ctgtgggatt cctgatgctg tgtgggtctc tggctccccc tgctgtagaa 660 720 ngggagtact ggccctggga cacagaactg caaggccagt ggcgccaggt accttccaca ggaagaagat ttgaggacat ttaaaggtac ccacttttac ccgtgccacc ttctacccca 780 829 gttcctggca gncatccaaa atttgnctcc aagacatgtt nacagacaa

<210> 268

<211> 847

<212> DNA

<213> Homo sapiens

#### <400> 268

tacgaatgtg gccggtgtgg gcgagccttt actcacagct caaatcttgt tctgcaccat 60 cacattcaca ctggaaataa accatttaaa tgtgatgaat gtgggaaaac ttttggactc 120 180 aatteteace teegtettea teggagaatt cacaetggag aaaaaceett tggetgtggt gagtgtggga aggettteag tegaagetea aetettatte aacateggat eatteacaea 240 ggagagaaac cctacaagtg taatgaatgt ggaagaggct ttagccagag cccccagtta 300 actcagcatc agagaattca cactggagag aagccgcatg aatgcagtca ctgtgggaag 360 420 gccttcagtc gaagctccag ccttattcag catgagagaa ttcacactgg agagaagccc 480 cataaatgca atcagtgtgg gaaggccttc agtcagagct caagcctttt cctccatcat 540 cgggttcata ctggagagaa accctatgta tgtaatgaat gcggcagagc ctttggtttt aactctcatc ttactgaaca tgtaaggatt cacacaggag aaaaacccta tgtttgtaat 600 660 gagtgeggea aageettteg teggagttee aetettggte ageategaag agtteaeaet 720 ggggagaagc cctaccagtg cgttgaatgt gggaaagctt tcagccagag cttccagctc 780 accetacate agegagttea caetggagag aagecetatg aetgtggtga etgtgggaag

| gcctttancc | cggaggtcaa | cccttantca | gcatcagaaa | gntcacagcg | gagaaactcg | 840 |
|------------|------------|------------|------------|------------|------------|-----|
| taagtgc    |            | 1          |            | •          |            | 847 |

⟨210⟩ 269

<211> 848

<212> DNA

<213> Homo sapiens

# <400> 269

|   | aaactagaat | aataaaaggg  | aaattataat | attcacaaac | ttgaagcaca | ctggaattct | 60,  |
|---|------------|-------------|------------|------------|------------|------------|------|
|   | gctataaatg | tttgttatag  | aatagaattt | ggtgcagggt | gaatttgatt | taagagggtt | 120  |
|   | taaattatat | gaactgtgtg  | aaaacattta | gatctaaggc | tgaaaacaat | tatcaactca | 180  |
|   | atgaaatttt | aatatggtat  | ttcacaactg | tgacttcatg | acagctgtta | caagtgtcag | 240  |
|   | gaatggtaaa | tatgtactat  | ttactaatgc | caacactgta | cagaagtgct | ttatatacaa | 30,0 |
|   | taaatcattt | attactcaca  | gcaatcctta | ccagtagatg | ctatttctat | ctgaggtttg | 360  |
|   | tggttaagga | aaaagagtga  | actgagtaac | tggtgtgagt | tcactcagtg | agtaagtacc | 420  |
|   | agagcgttgt | caagagaacc  | aagtgtagca | tccttcgtac | catagtcaca | gtcctacagc | 480  |
|   | agaaatttaa | gagagcatca  | agagagatgc | ttgcttaccc | gctttgtatt | tacttgctct | 540  |
|   | ctgagaagtc | tacttctcat  | ttatttctgg | aacacaatta | ggtaaactct | atctatttca | 600  |
|   | aatgttctct | tcagttgtct  | agtttgaagc | ctttgaggat | tagcaccttc | cagtttattc | 660  |
|   | aagggaattg | gacaaagaaa  | tgagaatgaa | ctataggatt | aaaggataaa | actaaagaan | 720  |
|   | gtgagṭtaga | agagtttgag  | ttcatgggcg | cagatttaac | atanaataat | cgaataatta | 780  |
| , | gtaggcataa | aaaggnggat. | atcgacctaa | ctagtagcct | ggganaaatg | gggatttggc | 840  |
|   | taaactca   |             |            |            |            | <i>t</i>   | 848  |

<210> 270

<211> 831

<212> DNA

<213≻ Homo sapiens

#### <400> 270

ttaatactet tgacaaaagt atgagtggat atetetcagg ttttcaaget agaaatgece 60 ttcttcagtc aaatctttct caaactcagc tggctactat ttggactctg gctgacattg 120 atggtgatgg acagctaaaa gcagaagagt ttattcttgc aatgcacctt actgacatgg 180 ccaaagctgg acagccatta ccactgactt tacctcctga gcttgttcct ccatctttca 240 gaggaggaaa gcaaattgat tccattaatg gaactctgcc ttcatatcag aaaatgcaag 300 aagaggagcc tcagaagaaa ttaccagtta cttttgagga caaacggaaa gccaactatg 360 agcgagggaa catggagctg gaaaagcgac gccaagcctt gatggagcag caacaaaggg 420 aggcagaacg taaagcccag aaagaaaagg aagagtggga acgaaaacag agagaattac 480 aagaacaaga atggaagaaa caacttgaat tagaaaaacg cttagagaag caacgggaat 540 tggagagaca acgagaggaa gaaaggagaa aagacataga aagacgagag gcagcaaaac 600 aggaacttga acgacaacgt cgcttagaat gggagagaat tcggcgacag gagcttctca 660 atcaaaagaa tagagaacaa gaagaaattg gcaggttaaa ctctaaaaaag aagaatcttc 720 atcttgagtt ggaagcactg aatggcaaac attancagat ctcangcagg actttcagga 780 tgtnccgact tcaaaaagca aacttcaaaa agactgggcc ctggaagttc t 831

<210> 271

<211> 783

<212> DNA

<213> Homo sapiens

#### <400> 271

| cttacgagcc | cacaggcccc | ggagtagcag | cggggaggcc | gggagcccgc | gggccggagc | - 60 |
|------------|------------|------------|------------|------------|------------|------|
| cgcccggccg | aggcgtgggg | gctgcggggc | cggcccatcc | gtgggggcga | cttgagcgtt | 120  |
| gagggcgcgc | ggggaggcga | gccaccatgt | tcagccagca | gcagcagcag | cagctccagc | 180  |
| aacagcagca | gcagctccag | cagttacagc | agcagcagct | ccagcagcag | caattgcagc | 240  |
| agcagcagtt | actgcagctc | cagcagctgc | tccagcagtc | cccaccacag | gccccgttgc | 300  |
| ccatggctgt | cagccggggg | ctcccccgc  | agcagccaca | gcagccgctt | ctgaatctcc | 360  |

agggcaccaa ctcagcctcc ctcctcaacg gctccatgct gcagagagct ttgctttac 420 agcagttgca aggtaacctc cgaggctatg gcatggcatc cccaggcctc gcagcccca 480 gcctcacacc cccacaactg gccactccaa atttgcaaca gttctttccc caggccactc 540 gccagtcctt gctgggacct cctctgttg gggtccccat gaacccttcc cagttcaacc 600 tttcaggacg gaacccccag aaacaggccc ggacctnctc ctctaccacc cccaatcgaa 660 aggattcttc ttctcagaca atgcctgtgg aagacaagtc agaccccca naggggtctg 720 aggaagcccg canaagcccc ggattggaca caccagaaga ccaagattta ccgncttgcc 780 aaa

<210> 272

<211> 775,

<212> DNA

<213> Homo sapiens

#### <400> 272

aacactacaa aattttcaag cacagcctat cggccataga tagtatcaac tagaggcaat 60 gtetttagtt tttattattt ttgaacetgg ageattttet gttggaegtt acaggatett 120 actgctttaa atcatacatt attaaaaaaa atgagggttt attctttgaa ttaccctttt 180 gtatgcagga gtgaagactg cttttttagt tgaccattca aaatcgttga attttagttt ttgcagacta ctaaaatttg cagtgacttt ttttttgtaa ggggggtaaa tgaaacattt 300 agcagccttt gaaatcagca agttgcttag atagtacttt agattttgaa actgaatata 360 acagtgttag aaaagtatgt gtaaggaatt gtatttacat gcatactagt agtacaatac 420 ttatagctga atttggttgg caaaagtatg ttttcatttt attacgactg ctagtcaggt 480 aagatatggt gggattettt etgtagtgtt tteagtgtet gggcaagggg aggagetege 540 ctgtgttata tgaggggtta ataccaatag gataggaaca gtttttagac tgttaattgt 600 gaattttaca tttgggtcat cactgttgtg tagatttgtt cacctattaa aataatgaaa 660 acceteattt gagtgtgtgt gtgtggtggg atcataggaa ttgatttgtg gagtgatett 720 775 tcaatagcac tgaagacaga antttggtat ttggnatagn ctacaccaaa gctta

<210> 273 <211> 783 <212> DNA

<213> Homo sapiens

<400> 273

| gcatcgagta a | tccatgaat | gggaagatgg | ttcccaggaa | cattcaccca | gcaacaaaaa   | 60  |
|--------------|-----------|------------|------------|------------|--------------|-----|
| aattaaacac a | aattggggc | ttgaattttt | gtggcaatca | atgactgaaa | aaaaaataga   | 120 |
| aaaaagaagg a | catgacctt | tttaaagaca | aatgaagact | cattttcagt | aactagagtc   | 180 |
| ttaaaaacta t | tttaatctg | aatgcagatc | attgtttacc | cacagagagt | tttatgacaa   | 240 |
| tgatttcact g | acatgcaga | atcaaatatt | atgatcacca | ccagcagcca | aaaaacccta . | 300 |
| ttctttgccc a | aggagtagt | agaaatgtag | actagacaga | caàacagggt | ctcctatttt   | 360 |
| gcctcattag t | gccacactc | tatacaacta | cagtcacgaa | ggggtcacat | ttggttataa   | 420 |
| ttactattag a | ataatatgg | gagtgtgatg | tttgtggtgg | aaacttgccc | atgacttatg   | 480 |
| taaccatttc t | gctgacaaa | ttttaggatc | taaaaacttt | gtgggttttt | ttgttttgtt   | 540 |
| tttgtttgtt t | gtttttggg | acagtetege | tctgtcaccc | aggctggagt | gcagtggcac   | 600 |
| ctccgcctac a | gtgttcaaa | cgattctccc | acctcagcct | tccaagtagc | tgggaccaca   | 660 |
| ggcacacgtc a | ccatgccct | gctaattttt | ttgnattttt | agcagagatg | gggtttcacc   | 720 |
| atgttggcca g | gctggtctc | aaactnctga | cctcaagtgg | cccctgctna | gcctccaaat   | 780 |
| gct          |           |            |            |            |              | 783 |

<210> 274

<211> 800

<212> DNA

<213> Homo sapiens

<400> 274

ttttttccag aaatacttgc agacttgaag gaattatcag tctttcattt tctatcatca 60 gtgtcctatg atagtttgtg cttccctccc tcatcccttt gttcatgtca ctctgttcac 120

caacccacte tgetgaaatg tegttattte tteaaggeee ggaggaaatg etaccactet catcagaggg ttcagagatg ggcagtgaga aggagcagag tccagaacca cacctgcctg 240 aggaaggga agggggtaag ccttggagag tggatgactc agagggttct tggatcccac 300 360 ctggggagaa ggagcatggg caagagagcc tgtcggatga actgcaagaa actcatccaa 420 aaaagccatg gcagaaagtc actgcccggg ctcgagagct aggggacccc attgctcatc caaggcatga ggcagatgag aagcccttta tatgtgccca gtgtggcaaa accttcaata 480 540 atacctecaa cetgagaaca caccagegga tecacaetgg tgagaageet tacaagtgtt ctgaatgtgg caagagette tegagaaget ccaacegeat ceggeacgag eggateeace 600 tggaagagaa acactacaaa tgccccaagt gccaggagag ctttcggcgg cgctcagacc 660 tnaccacgca ccagcaagat cacctaggca agcggccata ccgntgtgac atctgtggca 720 agagetteag ceagagtgee egetagetgt geattacegg acceaectgg ageceagace 780 ctacatttgg ttgngaatnt 800

<210> 275

<211> 865

<212> DNA

<213> Homo sapiens

#### **<400> 275**

actigeacti acteatette tageettaig accaggaace titgittigg geteaagtae acatectgat tiggittete eetgitgiaa titgagatti eecaaattaa giettataat 120 gattaggitt tgttctgagt tatttctaga gaaagaaagt attttagtat gtgtaaattg 180 tacaataatt tittigetgi igtaeteaet getaatagig gatigiatag ggiggigitt 240 ttatttcatt tattgtagac aaaaataatg aatttagtat acacataccc actaattcaa 300 gtatgtcaga gcacaaagtt ggcagctggt tatatttaat tcagcccctc tgaaaaagcac 360 atacagteta tactitgitt ataaatatee taggieetee eigeeeetaa atatatatti 420 tggtgaaget gtggtgeact attaatttte tgttteaaaa tgeaatetaa agatgeaata 480 aatatgatga cettgatagt tttaatgaaa tetteaatte ttgeagetgt gttttggaaa 540 600 gtgattaagc aatatttete aaacetgatg attettggat atttagetat tgteeteeaa

agagtcatcg tttcacgttt tcaaacatgt gctttgtgct gaagattctt gtcagatatc 660 ctgtgcttcc agagtatttt tatcttcaat tttatttaat ttgnttcatt ttgnttcatt 720 aagacaatgt ttcagatatg taatggggca aaccactata gatttctggt ggatagaaaa 780 atgaaatggt actaataagg ttaaaatgac ccttcgttga ctatcaagta ctggtgatcc 840 tttanttaga atgnatgtct canaa 865

<210> 276

<211> 775

<212> DNA

<213> Homo sapiens

#### <400> 276

gttacttaag aactetttgt gtccgtcctt ctaatggcac caatgcctcc catcaagcct 60 taaacctcac ctaaattatg tcattgggct ttttcatcca taaatgagca taccaggtgc 120 caagggaatc aatatgccat ttcacatgcc ttagaccagt gtccaaagaa agataaaatg ttattctata aaagctttct cccagcattt ctattccttt acattttgtg ccatatacaa 240 ctatggtttt ttaatgatct tatttctgac agctgttttt cttcagaaca tcaacagctt 300 ctttcctaaa ttagttttag tatgagttcc atttctaatt agctcaaatt aaagtcctag 360 agagcagcga ggtaatattt aaaccctcag gctaaaattt cggagtaggt gcagaatgtt gactetaaat gagtttttcc tgtgacataa cacgcatgaa agcaggattt ctttcatgtg 480 tgaaatgtct taaatcagac ttaccctttg tgattctctt ttagctttaa atgtcattta 540 agaagaaaaa agaaaagaaa attaagcatg acattcccca atatcctctg ctcactgtgt 600 tataatccct atcactccac aagtgaattg gagagagtga agacacaatg aacagaaact 660 tnectgaget teacaganga gtgteteegg gaccacaeag cetteaceat gtecatetae 720 gaaggctgtg gcaagccata tccacaaagg atgcctgntt cctgncttct cgggt 775

<210> 277

<211> 891

<212> DNA

### <213> Homo sapiens

## <400> 277

| gataacattt | agtaatttag | gagagaaaat | taaaggcatt | gttgaaaata | tgggaatcaa | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| cgcaaataac | atgagtgact | ttattatgaa | agttgatgcc | cttatgtcct | ctgtgcctaa | 120 |
| gcgtgcatct | cgatatgatg | tcacatttct | tagggagaat | cacagtgtta | taaagacgaa | 180 |
| tcctcaagag | aatgatatgt | tcttcaatgt | cattgctatt | gttgatccat | taacaagaga | 240 |
| agcacagaaa | atggcacagt | tgttggttgt | acttggcaag | attatcaaca | tgaagataaa | 300 |
| gttgttcatg | aactgtaggg | gcaggctttc | agaagcccct | ttagaaagct | tttaccgttt | 360 |
| tgttctggaa | ccagaactga | tgtcaggggc | taatgacgtt | tcttctcttg | gaccagtggc | 420 |
| aaaatttttg | gatattcctg | aatcacccct | cctaatcctc | aacatgatta | ctccagaagg | 480 |
| ctggttggtt | gaaacagtgc | acagcaactg | tgaccttgat | aatattcact | taaaggatac | 540 |
| tgagaaaact | gttacagcag | aatatgaact | agaatactta | ctactggaag | gacaatgctt | 600 |
| tgataaagtg | acagaacagc | ctcctcgggg | tctgcagttc | acactaggca | caaaaaataa | 660 |
| acctgctgtg | gttgatacaa | tagtgatggc | acatcatgta | agtattattt | aattgatggt | 720 |
| gtttaatttg | atgtttggtg | aattctctgg | tttcctaaga | gtaaaatgaa | ataatcttta | 780 |
| ttctgctgtg | ctgaacagtt | tgcagaaaac | aaaattgatc | tttgataaga | taaataaaaa | 840 |
| tggggaaaat | catactttaa | taattttgaa | nggtatggaa | aactcttact | t          | 891 |

⟨210⟩ 278

⟨211⟩ 813

<212> DNA

<213> Homo sapiens

#### <400> 278

aagaggctgc gcgctgctgt ttggggaggg ggtgtgtgga gccgggtcct gtgtccgcag 60
tggctgctgt cggggggtcg cctgttcgcg gaggtgcgga gagactcctt gggggtcgag 120
cactgtggct ggcatgcccc agtgttttgg ataccaatgc ataggactcc atagtaatcg 180
aatttaccag aggcgaacgt catgagcata gtgatcccat tgggggttga tacagcagag 240 (

acgtcatact tggaaatggc tgcaggttca gaaccagaat ccgtagaagc tagccctgtg 300 gtagttgaga aatccaacag ttatccccac cagttatata ccagcagctc acatcattca 360 cacagttaca ttggtttgcc ctatgcggac cataattatg gtgctcgtcc tcctccgaca 420 cctccggctt cccctcctcc atcagtcctt attagcaaaa atgaagtagg catatttacc 480 actectaatt ttgatgaaac ttccagtget actacaatca gcacatctga ggatggaagt 540 tatggtactg atgtaaccag gtgcatatgt ggttttacac atgatgatgg atacatgatc 600 tgttgtgaca aatgcagcgt ttggcaacat attgactgca tggggattga taggcagcat 660 attectgata catatetatg tgaacgttgt cagectagga atttggataa agagagggea 720 gtgctactac aacgccggaa aagggaaaat atgtcanatg gtgataccag tgcactgaaa 780 813 ntggtgatga aggtcctgng gaattatata ctg

<210> 279

**<211> 842** 

<212> DNA

<213> Homo sapiens

#### <400> 279

ccaaaatcca atagggcagt cattgagcct taaagttcca aaatgatctc cttagacccg 60. atgtctcaca tcgaggccat gctgatggaa gaggtgggct cccatggcct tgggcagttc 120 cacccctgt ggetttgcag ggtacagccc ccctcatggc tgctttcatc atgggctggc 180 attgagtgtc tgtggctttt ccaggcacac ggttgcaaac tgtaggtgga tctaccattc 240 tggggtctgg aggatggtgg ccctcttctc acagctccac taggcagtgc cctagtgaag 300 cctctgtgtg ggagctccag acccacattt cccttctgta ctgccctaac agaggttctc 360 cttgagggct ctgcgcctgc agcaaacttc tacctggaca tccagggatt tccatacatc 420 ctctgaaatc taggcagagc tttccaaatc tcacttcttg acttttgtac accaccacat 480 ggaagccatt agggcttggg gcttgcaccc tctgaagcca tggcctaact ggaccttggc 540 cccttttagc catggctaga gcagccggga tgcagggtac catgtcccaa ggctgcacag 600 tgcaaggggg actgggccca aaccacaaaa cctttttct tcctagtctt ccaggcctgt 660 720 gattggaggg getgetetta aggtetetga catgecetgg agagatttte eccattgget

| tcgtgaataa | cattcatctt | cttggtattt | aagcaaattc | tgcancagga | ttgaatttct | 780   |
|------------|------------|------------|------------|------------|------------|-------|
| cccanaaaat | gggttttctt | tggcatcatt | aggcttcaaa | ttttncaaac | tttcatggtc | ·´840 |
| tg         |            |            |            | •          |            | 842   |

⟨210⟩ 280

⟨211⟩ 862

<212> DNA

<213≻ Homo sapiens

# **<400> 280**

| acagtctcca | ctgaaaggct | aaatgggagg | atcttccccc | gtgacctcaa | aagctattgt | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ggatgctgat | ggaagaattt | atattcggaa | ctggcagggt | ggcatcctgt | ctgggggctt | 120 |
| tgagaagaac | ccgaaaccaa | ttttcactga | gggcaagaac | cagctggaga | ttcagaatct | 180 |
| acaggaagac | tgggatcact | ttgagcctct | gttgagttcc | cttctgagga | ggatgccaga | 240 |
| attagagact | ctggagatca | tgaagttggt | gaactgccca | gagaccttca | caccagacat | 300 |
| gaggtgcatc | atgggcgagt | ctcctgcagt | gcagggctac | tttgtcctgg | caggaatgaa | 360 |
| ctctgctggc | ctttcatttg | gtggaggagc | cggaaagtac | cttgccgaat | ggatggtaca | 420 |
| tggttatccc | tcagaaaacg | tttgggaatt | ggacctgaaa | cgttttggag | ccctccagag | 480 |
| cagccgcacc | tttctgcgcc | accgggccat | agaagtcatg | cctttgatgt | atgatctgaa | 540 |
| ggttcccgc  | tgggacttcc | agaccggtag | gcagttacgc | acctctcctc | tctacgaccg | 600 |
| gctggatgca | cagggagcca | ggtggatgga | gaaacatgga | tttgagaggc | caaagtactt | 660 |
| tgttccccc  | gacaaggacc | tcctggcatt | ggagcagagc | aagactttct | ataagccaga | 720 |
| ttggnttgac | atcgtggagt | ctgaagtcaa | gtgctgtaag | gaagctggtg | tgtcaattga | 780 |
| catgtcctct | tttacaaagt | ttgagataca | tncccttggg | atcangcctt | tanaagttct | 840 |
| acagtacctt | tttttccagg | ga         | •          |            |            | 862 |

<210> 281

<211> 842

<212> DNA

#### <213> Homo sapiens

#### <400> 281

acactgactt ctggacgtgg tcagggtggc tttctctggc tggcatggac ttgagcagaa acteattgee ggetteetee ttgeaegage accaagtgat teecaggtee eccateetee 120 cctgggacat cgaggacaca caaaaacctt gttcaccctc cactgagagc ggggctagag 180 atggatgctg agtacaggaa gggtgtgtga ggattccttt ggctccactc ttgtttccaa 240 ctattgctgg tcctaggcgc ccagtcctga gcaaccatga cgatggagac tctccccaag 300 gttctagagg tcgatgagaa gtctccagaa gccaaggacc tgctgcccag ccagaccgcc 360 agetecetgt geateagete eaggagegag tetgtetgga ceaceaece caggagtaae 420 tgggaaatct accgtgcccc tggacatgac aacatgactc taggggttag tcagctgaag 480 aagtttagtt cctaattata taatatttac atcagaggca gtggggtagg ctaggggatg  $540\,$ teactgttte egettgaeet tatetttete attgaeeaet gtettetetg aacttgatea ttagccaagg acaaaatgca tgttgcccta atttctttcc tacccctgcc tctatctctg `660 catctagaac agctaaatgg aaagatacag agggatcctg taaggttggt ttccctttac 720 gtccatcaag atcaaaattg agagaatcaa gttccatatc tgaatgatct ggaggttcta gagatggaat taggaaactg gacnggcatt gncttgacct nccagaggtt ttacttcatc 840 842 cť

<210> 282

<211> 856

<212> DNA

<213> Homo sapiens

#### <400> 282

cggtaatcaa acccaattat atcagaatac ctttctgaat ttgagatttt tgctctacat 60 tttataatga ataaggctat tttttgaagg tatttcattt tgaattctgt cattaacctc 120 aaaagctttc tactgctttg cggtgaaggc aaaatattcg ataactcaac ttaggcccca 180 ctgttcccca acttcatgga ggccagaaga ctttactttg ttccataatg aaatataaac 240

acagaacaaa gttgtaaaag tagcatggat atgttgaaac tttggacaag cttcttgtcc tttggaatat gggatttata ttcatctcct caatatccca tgtatgcaca gaaacttcag ttctatttct atagacacag gaacctagtg actattgaac gtaattgtaa taaaatgctg -420ctcattgagc caaagagaag aaatgattta ttaacatggg gacaccaaga aaaacaaagt 480 540 atgettttat teeetttgte aageteagtt ttagggtttt ttetttttt tatagtgaca atccatagat atagacattc ctaaaagaaa aataaataat tcagtagata tatgtcactg 600 ttacctgaat atggaatgaa tttgatgttt tttattttgt tgagacaggg tcttgctctg 660 teacecagae tggagtgeag tggeatgate acaceteaet geageettgg ceteteange 720 tcgtgatcct cctgcctcaa ccctcgcaag tagcttggga ctacaggcgt gtgccaccag 780 tectggetaa ttttttgnag atataaggge teatgatatt gneeagetga attgaggtat 856 ttaagtgant ttcatg

<210> 283

**<211>** 735

<212> DNA

<213> Homo sapiens

#### <400> 283

agtggaacat ggcgacttgc gccgaaatcc tgcggagcga gttccccgaa attgacggac 60 aagtettega etaegtgace ggegtettge acageggeag egeggaette gagtetgtgg 120 atgacctggt ggaagctgta ggggaactat tgcaagaggt gtccggggac agcaaggatg 180 acgcgggcat cagggccgtg tgccagcgca tgtacaacac tctgcgtctg gctgagccac 300 aaagccaggg aaatagccag gtgctactgg acgcccctat ccagttgtca aagataacgg 360 agaactacga ctgtggaacc aaacttccag gactgctaaa gagggaacag tcctcgacag 420 tgaatgcaaa gaagttagag aaggccgagg ctcgacttaa ggcaaagcag gagaagcgct 480 cagagaagga cacgctcaag accagcaacc ctctagtctt agaagaggca tcagccagcc aggcaggcag cagaaaggag agtcggttgg aatcatctgg caagaacaaa tcctagtcgt 540 600 cteccaegae egeaaettet tgaatgeeat egeeacagae ateateeaee tgeacageea 660 gcggctagat ggttaccggg gagactttga gaccttcatc aagagtaagc aggagcggnt

| gctcaaccag | cagcgtgaat | atgaggcgca | gcagcagtat   | cgccagcaca | tncaggtttt | 720 |
|------------|------------|------------|--|------------|------------|-----|
| cattgaccgg | nttcg      |            | i de la companya de l |            | - ·        | 735 |

<210> 284

<211> 862

<212> DNA

<213> Homo sapiens

#### <400> 284

atataatget gtatteattg ateatattte tgtatttaaa taagtaeatt tittaaaaea 60 tcataaagtg gatcagtaat gctgtaatat cacatttcat gtattataca acatttttga 120 aatggagtac tecaaagtaa tttgettett atggttacca aagtttaaag aataceetaa 180 catgcactcc aagattttaa gaggaaaggc tttgtgtttt tcattactgt attatgaaat 240 300 ctgagagtgc aaaactagtt ttcttaggta aaccccgtaa tcagtttcca catttacctg taaaagtcag tggagggcat acatctggaa gtagtagtgg cggtacacaa tgtgtgttaa 360 tatgatttcc aaggggtacc tagagtaaac tttcttaatc acagatctga tctgagcatg 420 ccactccttt cttaaaatct tttgttgatt ttccatttcc ctaaaaggaa ggcccactgg 480 agcatgggcc ttgcaaagtc ctctttctgg cttctgcctg cctgcctttt cagcttcatc 540 tetgecatet tecetgaatg aacttttgte agtggeeteg etetttetae etatgagatg 600 ttgtttctgc atgttcttgc atggaattct cttcctccca accetgtttc attcctttaa 660 tetgtacaac tetttettat eetgaagtet ttatgttaag gttgeetttt caggaagaet 720 tttaattgna ttagctaatt aattaattaa tagtctgagg tatttggagc tgagattcta 780 840 tggggattag ttgctggagg tagnttagag ccngatgcga aggctttcta aactgngctt tcaaggtttg aacaggaaat ga 862

<210> 285

<211> 839

<212> DNA

<213> Homo sapiens

# <400> 285

| tatggatatg | cttattaatg | cacttgtttc | aaaatcccaa | attgcacaaa | tgtgttaata | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ttttaagaaa | caaaatgaat | cctacaagga | gaatgatttt | tagccacaca | tagggttgga | 120 |
| tcttgagagt | gacctacaga | ataaaagtac | ttttaaaata | aagtagtcag | aggctattca | 180 |
| aagggtaaaa | taatcatagt | accacattgg | tccacttgac | actaaccaat | cgatcatttt | 240 |
| tttttaatca | agaaagctag | attctatcag | ataaaatcac | tgcttctaaa | gagtttaaat | 300 |
| ctagttagaa | aaagttatag | aaatgtttgc | aaagataagt | aacagataga | gtcagtagag | 360 |
| gataagatca | aaaacaaaac | caagcaaaag | atgagttcag | gggagtttgc | catcaagttg | 420 |
| gcaaaactga | cttacttagg | gaagaaagtt | ataaaacagg | aaaatatgag | atgaaccttg | 480 |
| agtgatgtgg | aagatttaga | taaatggaaa | ggaaggagaa | aatggagttc | tttaggtggt | 540 |
| tgtaattgga | ggaggaaatg | aatacacaca | tcttgttgac | ttaaacccag | acattcagca | 600 |
| gctctctata | catatctgga | aaagactgca | cagtcacctc | ctgtctctca | ccccaggtat | 660 |
| tacttagaat | tattatcata | tttcccttcc | tttaaagtaa | gtaagggtga | ttggtggcca | 720 |
| atatgggaga | actatggatt | tttccattac | ctaataataa | ttgggattta | ntggggtctg | 780 |
| gttaagcatt | ttccntatta | actcctttaa | gccttttcaa | cagcccttgc | naaataggg  | 839 |

<210> 286

<211> 855

<212> DNA

<213≻ Homo sapiens

# <400> 286

| gtttgaaatg | ctggtagttc | ctgaacagga | gtacccttta | gtttgtgttg | gtgtcagtag | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| aggtagagac | ttcaaccaag | tggttcgatt | tgagacggtc | aatccaaatt | ctacctcttc | 120 |
| atggtttaca | gaatcagata | ccccacagac | aaatgttact | catgtaaccc | aactggagag | 180 |
| agataccatc | cttgtatgct | tggactgttg | tataaaaata | gtaaatctcc | aaggaagatt | 240 |
| aaaatctagc | aggaaattgt | catcagaact | cacctttgat | ttccagattg | aatcaatagt | 300 |
| gtgcctacaa | gacagtgtgc | tagctttctg | gaaacatgga | atgcaaggta | gaagttttag | 360 |

atctaatgag gtaacacaag aaatttcaga tagcacaaga attttcaggc tgcttggatc 420 tgacagggtc gtggttttgg aaagtaggcc aactgataac cccacagcaa atagcaattt 480 gtacatcctg gcgggtcatg aaaacagtta ctgagaattg ttgtgctttg acagttaact 540 ctagaaagaa agaacactac cactgcaaca ttaatggatg cttgaagctg tacaaaagct 600 gcagtaacct gtcttcagtt actttgtaat ttattgtggc atgagataag atggggaaaa 660 ttttgnttta agtggtatgg atatatttag catattgaac cacacaagtg cttaattcat 720 780 tggtatgtaa tctttgtaca tataggcagt attttttctg ngaaacttca tattgctgaa gacatacact aagaatttat gtangatatg nacttttatg agatgtacaa gtaagtggct 840 855 tatctgtaca gatgt

<210> 287

<211> 851

<212> DNA

<213> Homo sapiens

#### **<400> 287**

aaaataattt ctaggttaag ttggaaacat gtgataacat taaaaaattt aaaatgtctt tgggcctgaa agattatgcc tttacattca acatgaaatc catggatgga gtttatataa 120 ataaccatgt aggettacca atcettaacc etettgtatt agtecatact cacatggata 180 tttccatatc cacttttact cttgtgtcaa aagacaaaat taaaactcat ttagttatgt 240 atctaattgg cttttattct cgattcatga atcggtgcag cctccattct aatagaatca 300 cagcttctac tgggcaatgg cagactattg ggttttgtga ggtgggaatg aggaaacata 360 acaatgggga aaataagctg attagttaac aatagattac ttcagtttac ttttttttta 420 taagggttaa agcagagggg actttcttgt tctgactcag gtaggctaga atctcctgtt 480 tttaggaaaa actcgtctgt tttgggatct atctgctttc ttacagttgc agtttgatta 540 tatgacattt ggcatgagtg actccacttt gttaacactt gaaaggttat tattcccata 600 tggagtattc acatggatgt agccattggc agttatacaa gatcgtgttt cttttctttg 660 720 cccctgccc ccgtcaccta agaacttgnt agatattcca tttcttttt taaaaaaaagg 780 atccagtgag taaaggtgat agagagcata tggataaata gtgaagaagc ttgatgaggg

gagtgggtag ggttagaaac cccangggaa ttactcaggg ttaaaccctg ncatttatat 840 caagccatat t 851

<210> 288

<211> 858

<212> DNA

<213> Homo sapiens

<400> 288

agtageeggg tatggtggtg cacaactgtg gtetecaeta ttgggagget gaggtacate acttgagcct agcaggtcaa ggctgcagta aggtatgatc acaccactgc actctagctt gggtgacaga gcaagacccc atcttggcag gtgggggatg caagaaaaat gcaaggaaca 180 gatagagata aatagaaaac atataagaag acaatcatat taaatgtaca tggtctaaat 240 acccccaatt aaaaagcaga ggttttaggc catatacatt taatgtgatt gtcttcttac 300 atgtttttat cagagaaata aaactatcgc cttcaagaaa cacaagttaa atacaaagat 360 gcaaacaggt taaaataaaa gaatggaata atatatacca tgcttacgct agtcaagaga 420 aagctagagt agaaatacta atatcaggca aagcatattt cagagttaaa cacaacattt 480 ttccactatt tgcagtcaaa agtatcgtta acactctctt tactctgctc aaagttacag 540 agttettttg tataaacatt agaacactta teacageetg eetataatgg agaataatte 600 catgttgtat actatacaac actcttacta aagtccatta gacagaaata tgtagcattt 660 gagacacett ccaattataa aactetatge aaacaaaaat taacaacgea gatetgagae 720 tattatatta teetgtgaag gaaggtetge tgtetgeaca gtggteetag getggettte 780 840 tgaggacttt gaatttcaag agggtcccct aactggtaat catgggttac tggatctaga 858 ctatggaaat aatgnggg

<210> 289

<211> 847

<212> DNA

<213> Homo sapiens

## <400> 289

| aaaaaaaaaa | aaaagaaata | caccatccaa | tcagaacaag | tctgaaataa | acatgtttta | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| aaagcctgta | atgacagaga | ggtggcaaaa | atgaagagga | tgctcaaatg | aaaaggaaaa | 120 |
| agaagtttag | gaagaactac | ctgaagccaa | gagacctctt | actttgtcca | ggtgggaaac | 180 |
| tgaggcccag | agagggaaga | aagctggtca | aaggtcacac | acccattgga | agctgagtga | 240 |
| gtgacactca | ggaggtgagg | attccatggg | aagagcacct | agaggtgatt | ctcccacctg | 300 |
| cagctcctgc | atgggctcta | gaagctggtt | taacacatga | ctcttctgag | cctttgcctc | 360 |
| atctgtgaaa | tggacacaat | gacaactact | acggggtggt | ggtgagcaga | aggcaggtta | 420 |
| tcctctggcg | tgtgagatac | tcagcccagt | agagtgttag | ggactcataa | aggettgeta | 480 |
| ttagaaatta | gggccccagt | ctcctaggac | agggttttgt | tttgtttttg | tttttgacac | 540 |
| aaggccattg | ctctccttta | aaggtttggg | ttgtttgtgg | cagggatggg | gaaaggatct | 600 |
| gcccttccca | ggccctgccg | tgcccagcac | acctgccatg | ctgaatctcc | cctcaccctc | 660 |
| gcagggaccc | tctgaggagg | gtattccccc | attttgcagg | ggagggaatt | cangctcaga | 720 |
| agtgaacact | tcagaacttg | cacctgccgt | gcctgccgag | ctgtgcctct | tctgtgngca | 780 |
| tgcgttctcc | atnccaggtt | ccttacctct | gatcttgaat | ctttacggat | gccctcggct | 840 |
| tacttct    |            |            | -          |            |            | 847 |

<210> 290

<211> 860

<212> DNA

<213> Homo sapiens

#### <400> 290

atcgagtcgg ccttgttgga actggttaac atgctataaa aatggcactg tcatctgaag 60 taaatgtctt tgaacttaga actgccatat aagaatttgg actctttgcc acagagtgaa 120 gaggaagccc aggagaacaa tgagtcagtt tttttttctt tttttctaca ttgcctacat 180 ttaatattct tttagagagt tttcaaagaa ttgcttatgc aacacctatc ccagtattta 240 tacagaggga gaaattgatc attttcagaa agtcctttat ttaggtatgt actacacctg 300

ggctgactct tatactgatt tctaagttaa ttgtatccta tgcacagatc tcaaaaggac 360 tgtgggtgaa gaaacaagat catcagccca agacccctat tcaaccctaa ctgggttcct 420 tttcctattt tccagtgcag cttatccttg tacctaaagt tgagtagccc cactaggaaa 480 gattggcaga aaggaatagt taagcacccc ttggagcttg ctgcctgcag gagcctactt 540 ctaggtactc agetteeett ecaeteteta gggateetgt agaccaeagt gtttgtgete 600 aactgcagaa gcttcatgtg agaaaaaagt ttccttttct ccactgacat attcttccac 660 tttttcttta tataatttcc tgctggtctc tttaatcccc aggcttcttt caaactcctg 720 nttctctata tagtagcttc ctgtacaaat gtatgtcaca tttatatggt ggaaacttgc 780 ctaaataaaa ttaggcagat gtgtgatgcc nggatatccc catatgactt naccccggcc 840 cttcccttgc ttnatttagg 860

<210> 291

<211> 850

<212> DNA

<213> Homo sapiens

#### <400> 291

agaagcgcag cttctcgggg aagctgtcat ggctgctcct gtacgtagtc acggtcttgt 60-120 gctctaaggt gagtggagga cgagcttggg cttagcggca gcccgtatca catcctagac 180 tttttacttc gaggagaaga gtctcacgag ttgtcctgga agaaaacgac agcacgtgtt 240 ctttttcact agtagaagtg acgttggttt catgttgaca actttgaagc catttggaag tgtttcagtg gagagcaaaa tgaataacaa agcgggctcc tttttctgga accttagaca 300 attcagtaca ttagtttcaa caagcagaac tatgaggcta tgttgtttgg gactttgcaa 360 420 accaaaaata gttcattcaa actggaacat tttaaataac tttcataaca gaatgcaatc aactgatate attagatate tettteagga tgeatteatt tttaaateag atgittgett 480 tcaaacaaag ggcataagca ctctaacagc ccttagaatt gaaagactac tttatgctaa 540 aagactgttt tttgactcaa agcagtctct tgtccctgtt gataaatctg atgatgaatt 600 'gaagaaagta aaccttaatc atgaagtctc caatgaagat gttcttacca aggaaacaaa 660 accaaaccgt atcagcagta gaaaactgtc tgaggaatgt aattccctga gtgatgtgtt 720

| agatgcattt                | tcaaaagcgc | ccacatttcc | tagtagcaac                            | tatttcacag  | caatgtggac                            | 780   |
|---------------------------|------------|------------|---------------------------------------|-------------|---------------------------------------|-------|
| aattgccaaa                | agactgnctg | atgaccagaa | gcgctttgaa                            | aaacgactga  | tggttacccc                            | 840   |
| ctgcattaan                |            |            |                                       |             |                                       | 850   |
|                           |            |            |                                       |             |                                       |       |
| <210> 292                 |            |            |                                       |             |                                       |       |
| ⟨211⟩ 113                 |            |            | •                                     |             |                                       |       |
| <212> DNA                 |            | :          | •                                     |             |                                       | •     |
| <213> Homo                | sapiens    |            |                                       |             | • • • • •                             |       |
|                           |            |            |                                       |             |                                       |       |
| <400> 292                 |            |            |                                       |             |                                       |       |
|                           | ttgtggcggc | gctggaggct | gngttcggna                            | ggcgntgcgg  | agacgcgtat                            | 60    |
| $\mathbf{v} = \mathbf{v}$ |            | •          |                                       | cgtcaccccg  |                                       | 113   |
| 4554505050                |            |            |                                       |             |                                       | 110   |
| 404.00                    |            |            | · · · · · · · · · · · · · · · · · · · |             |                                       |       |
| <210> 293                 |            |            | ***                                   |             | •                                     |       |
| <b>&lt;211&gt; 848</b>    |            |            | *                                     |             |                                       |       |
| <212> DNA                 |            |            |                                       |             |                                       | • • • |
| <213> Homo                | sapiens    |            |                                       |             | · · · · · · · · · · · · · · · · · · · | •     |
|                           |            |            |                                       |             |                                       |       |
| <400> 293                 |            |            |                                       | •           |                                       |       |
| aaatataaac                | tagtaagtac | tgtaaaggaa | agaaacatgc                            | ttctaataga  | aaaaatatat                            | 60    |
| taaaaaggaa                | cagtaccgtc | actgggaaat | acaggaagac                            | ttctctgagg  | aattgatctc                            | 120   |
| tgagttggga                | ttaaagtgga | aaaagcactg | gaagaacatt                            | ccattttgag  | ggaatagcat                            | 18.0  |
| gggaaggtcc                | ccatggaatg | aagaaggatg | atgtattaga                            | aaaactgaag  | gaaggggata                            | 240   |
| atgctgagcc                | aggaaagtaa | ggagcctagg | cagtgtaaga                            | tgattccaga. | gaggcaggca                            | 300   |
| aggggtagac                | ctacaactat | agtataaata | actaacttaa                            | atgactatag  | aacatgataa                            | 360   |
| ttctgaaacg                | ttctgtaaat | agtttttgta | attaataatg                            | gataatgccc  | tacattacaa                            | 420   |
| ttatgtttta                | gactagaaaa | gcatttcccc | tcttgataaa                            | gtttcaaact  | attcagtgga                            | 480   |
| gaaacttgaa                | tctccatatt | gtaggggtta | tttctctttt                            | gtgattatag  | ttttcaaatt                            | 540   |
| tcgtattgag                | tgttgcttac | tgaattgagt | ttagaatcat                            | cagttatcat  | aagacttgtg                            | 600   |

tcattaataa aaatgcagtt tgagtgcttc ttaacactag tccaaacatt tagacgtaag 660 atcaccataa aaaaattcaa taggaataat aaatcagcat cagaggatat gagggatatg 720 anggcctaag tgggaaatgt gtgtaccaac ttaaaacaaa gagcttgaaa atttaaaatt 780 acttaaataa ttaatttcat ttatgtgatg ntagccacca tgatgataat ctgaatgaag 840 acctccct

<210> 294

⟨211⟩ 781

<212> DNA

<213> Homo sapiens

#### <400> 294

gatttagagg tgtggaaaat cttttaacgg ggagatcctg aaacacggaa acatggcagg gaagttagaa tttcctgatg gtcattttta acattttaaa gtttactttt tggttgttgc 120 catttttcta gaatccgtgt cttttttggg gaaatacagt cctttgagga ctagaattta 180 atgatttctt tacacatcta ggattttttg agatttagaa aggatatggc tttattccta 240 aggaagtgga ggcagcagtt tctaggatac tctggtttca aggcatgcta acttggttgt 300 gatgtctaac ccattttggt ttacacagtc tgaccactag cacaatgcct ggcacatagt 360 ttacaaatca tttaaggcaa gcttaccatc ttaagacaat ttaatacata gaagtgtccc 420 tcctaaaaat ctgagtttga tttagaaatc cagttatacc tgcaggtact gatgactaat 480 tccttctttg aagacaaaat aagcagctgt gtagcttcag tggctctcaa atggataata 540 gattcagtgt atactcgctt tgaactttcc tgttttttga tcagctagat aaatgacttt 600 agtgggtaaa tgtctgcctc caaaaccaaa ttctgaccct gatctaagta ttctactgca 660 ccgctgtcac tggaatatca aagttggccc tcagactggt gcctggttcc ttggattggc 720 ttgagtattg aggtctgnct catcttacta gggaactaaa atgatgttga ttggtttggn 780 781

<210> 295

<211> 721

<212> DNA

<213> Homo sapiens

#### **<400> 295**

aggtttccgc agctgagggg gcagctccgc ggcggcgtcc ggggtctcca gtagggctga cgctccggtg ctcgcacaat cccccgcctc ggctggcaac gggcgtccct ccactccccg 120 agtoccoggo agcogocgoc accocagogo goccogatot ggccccotgo cccgcgaaga 180 tggctgccgt acgccgggcc cgcagttatt gccgctgcct ggtgcgcttc tccgaccgag 240 300 aactetgeta ageteegetg cagagacagg caggagtaga cacceggaca eccagcacce ctcctccggg gggcggtgca gagggggcac ggagagcccc tcgagcgcag caggccgccc 360 cgccagcatg gcagaagctg aggaagattg tcattctgat actgtcagag cagatgatga 420 480 tgaagaaaat gaaagteetg etgaaacaga tetgeaggea caacteeaga tgtteegage tcagtggatg tttgaacttg ctccaggtgt aagctctagc aatttagaaa atcgaccttg 540 canagcagca agaggetete tecagaaaac ateggeagat accaaaggaa aacaagaaca 600 ggcaaaagaa gaaaaggctc gagaactctt cctaaaaagca gtanaagaag aacaaaatgg 660 720 agetetetat gaageeatea agttttateg nanggetatg caacttggae etgatataga 721

<210> 296

**<211> 847** 

<212> DNA

<213> Homo sapiens

#### <400> 296

aggagaggcg gagaaggaac cgagcgggca gttgagggaa atctcggagg aggttacctg 60 cgatcaaact ggggctgcgt agtgttaggg tcaggcagct ttgaagtgga atccggatcc 120 gccactctcg ctgcgtgata ttgggcatgc catcaaagcg ctctcaaccg aacgtctcgg 180 gtaaaatggg attagtgaag tctaccaagg tagttgtgag gatcaagaga gataacgcgg 240 aaaacgcctc acctggcacg ttatagatcc taaatgccta gctattatta tggagcccac 300

aacctccata ttttacaact gggaacacgg gactcaaaga gattaaaaaa ctaaatgact 360 cactcaaggt caggtagtgg tggagaccca ggcttcaagt tcaatactct ttgtcctaca 420 aagcetteee ttaagcaggg gtaataaaac attteagaaa aaccaeetta aagagcateg 480 cttgtgatct gtggatcact tggtagtccc cacctccctc ccatccccgc aaaggtttag 600 agctggacat aagggccttg gtgcaacttt tggagggcag ttgttcagct tctgaatttg catctgaacg agcaataagg aattttctgg gaagttaaga atttccaata aatcttggac 660 tactctaaaa tgcaccagaa attacgtggt cacactcgtg cagtgaaaga agctttggca 720 gtagcataag acattaagca gaagtaggaa atgcagtgag gaagaattgg aatgttttca 780 840 acagetgeea etatggatet aggatgagag etttneacat gntggtaaga atgagagaen 847 gattact

<210> 297

<211> 757

<212> DNA

<213> Homo sapiens

#### <400> 297

gtaaaggaat gtctttttaa ttcagctttt cttttctcca tgctagtgtt atcaggtttt 60 ggtatttatt tacttacagc atatgttatg aagctggttt gaaaattggt tttagatata 120 totgoaagtt tactactttg actgtaaaaa aaaaaaatga aaaagtagtt gacatotgto 180 240 ctcagaagaa gtttgcaggt tgcatatttg tgtgtaaata cacaggctaa aaggtaattt atgttccttg ggaattgaaa tggtcagtgg cccgttacag aaacttatca gtcatatatc 300 agcaccagtt cattetttg cacettaggg accatetgte ecctgaggtg acctgagaaa 360 caaccagttg cccacagact gttatttctt caagtgagcc aggatttgat ttcactgcct 420 tatattctat ttttagtgta cagtgctttg attttttgga aaaactaaat tttaaacata 480 540 tttgaaaaat gttataagac ttggacatta agtctgttga tagccaaagt cagtttacca aagtaaaaca nataaattet atgettette attgneaaag ageagtetge cateatgtgg 600 atataaatgg actatgtaaa gtgacatggt gcttactete tacctaataa tagceteeet 660 cctgttccaa caagataacc aacaggtata tttaatttac cagntaatat gttttggata 720

| N.                     |            | •          |                                       | · :        |   |         |
|------------------------|------------|------------|---------------------------------------|------------|---|---------|
| attgctgcct             | tgaaatgcta | tatgnttata | ggnccat                               |            |   | 757     |
|                        |            |            |                                       |            |   |         |
| <210> 298              |            |            |                                       | • • •      |   |         |
| <b>&lt;211&gt; 742</b> |            |            |                                       | •          |   |         |
| <212> DNA              |            |            |                                       | • .        |   | •       |
| <213> Homo             | sapiens    | •          |                                       |            |   | ٠       |
| •                      |            |            |                                       |            |   |         |
| <400> 298              |            |            |                                       |            |   |         |
| gaaggagacg             | ctattctcag | tgatgcccgg | gtaaggccca                            | ggctggagcc | cggggcaggg                              | 60      |
| gttgaccttt             | caggctacag | tggctgatga | tggtaccagc                            | aggtggcctg | aggccatgga                              | 120     |
| cctgagaatg             | gagcagctac | actcacagga | ggggcaaaga                            | gacaagagcc | ctgccatata                              | 180     |
|                        |            | actgaggagt |                                       |            |   | 240     |
|                        |            | tttggagcta |                                       | *          | • | 300     |
|                        | <b>3</b>   |            | \$ **                                 | * *        |   | -       |
| *                      |            | gcctcagttt |                                       |            | •                                       | 360     |
| gcccagagtc             | agaaggctgg | ggggagaacc | caatgagaga                            | gtgtagttgg | gagcactttg                              | 420     |
| ccgtcagatg             | atacagtgcc | ccccaagcac | cccacaggac                            | agcgctgcct | acatagtgac                              | 480     |
| gtgatgttct             | gatgacaata | gtgagaagct | ggagagcact                            | gttgacagca | tgttaccagc                              | 540     |
| attctcttta             | gcgtatcctt | ggagctttgc | taaggagaca                            | caagtcagtg | gcctcaaata                              | 600     |
| ctgagcagct             | ggtgaataat | ggaggcagaa | ggccacctct                            | tttgggtgag | ggagctcact                              | 660     |
| gcttcacagt             | ggcctttcag | ggacagtctt | cagetttgca                            | gatcacgang | ggcgtncagg                              | 720     |
| aagggctgan             | gccctcgtcc | tt         | •                                     |            |   | 742     |
| • ,                    |            |            |                                       |            |   |         |
| <210> 299              |            |            |                                       |            |   |         |
| <211> 386              | 1,         |            |                                       | . •        |   | , · · · |
| <212> DNA              | •          |            | · · · · · · · · · · · · · · · · · · · |            |   | ٠       |
| <213> Homo             | saniens    |            |                                       | • •        | ,                                       |         |
| ATTON HOMO             | 20p 1 0110 | -          |                                       |            |   |         |

<400> 299

gagccgagcg gcttctgctc aatggcggaa aagccgccgg tgctctgacg gcctcgttcc 60

cctagcagtt gcggggagt ttcctgccg cgcggctga gtctctgatt ctcagggttc 120 ggtggttga agatgctca gagagacgag gctgcggcg aggaggtggc ggcggcgaa 180 tcggcaacgg cgctagggtg gagagaaggc ggcagcggc gcggcggcg cgtgagggc 240 cgggcggtgt aaacagcccc ggaggcggcg gaggcggcg tcgagacccc gagggggaag 300 cggcggctga gtcagggtcg ngcctccggt ggaaacttgg gctgagtacc gcggnggtcg 360 cgagcgaggc gccctagaca tnttgt

<210> 300

<211> 880

<212> DNA

<213> Homo sapiens

#### <400> 300

60 teceaagtat teetttette eeaacetata ttataettgg teaaataaag teagggtaat 120 caggcageet gaaaggaage agggeateta cetgeetete tggteagatg gagtaattag .180 gaacaaaaaa ggccactctg ttgttagcca cacctattta tcaagaacaa aggagcatag 240 cattttaaat tcatttgage tgaaaccetg getggeteag actettaett gtettateae 300 gcaagatcag ctttgtatat cattttaaag aggtcgtgtg gcgtgttttc ctgacttctg tcatctcaag ttaaatatgt catcagaaaa tatatatcat ccagaaaatg gtggctctct 420 cttcctgtga gacactcttt ttagaaattt gtcttctagg tatttctatt ttaaaatgtt cagtttctct gcaataactt tcaaatttca ttatttttac caagctagat tttgtatatc 540 600 tgtatacata tttatgtaat aatcacttca tatttgcaca tagtttttga acccagaaaa gtaaaagaga aaactagtga cttgtctctg gtggcaaatt ttctctgtga ctaaattaaa 660 accatgaacc tgtccagtac agaataatgc cactggtgaa gtcaggctta aattcacttt 720 aattetagag aaactgtgaa tttagaagga ccaaaagtca aaatgcaaaa gataatgcag 780 acceattage actggnetea tatteagnte aaatatttae tetagtaceg ataggatete 840 880 tgaatateet tateettgae ateacaatae titticattg

<210> 301

<211> 806

<212> DNA

<213> Homo sapiens

### <400> 301

| aaatagatgt ttatcatttt | ttatatagac | tcattgaaaa | aatgactttg | tgttcttcca | 60  |
|-----------------------|------------|------------|------------|------------|-----|
| gtacatacca tcatgtctga | gagggcagag | atctagacaa | gtgtgggaàa | gatgactttg | 120 |
| gatcaaaatt ttcttgtgaa | tataatgtgc | ttatgcgtaa | tttaaagctg | actgtattaa | 180 |
| agatacattt tttgtcaacc | agatgattgt | taaatacctg | tgaagtatgt | gtggcccggt | 240 |
| cctatttcct cacctgttta | cagtgaatca | gacgtcccaa | tagatgtgga | gacggtcaca | 300 |
| tcaacgccta tgccactcta | tgacaatcag | aaggcacgca | gcgtgatgaa | tgagtgtgaa | 360 |
| cggcatgtca tctttgccag | gactgatgca | gatgccctc  | ctccaccaga | ggactgggag | 420 |
| gagcatgtca acaggactgg | ctggacaatg | gcccagaaca | agctattcaa | caagatcctc | 480 |
| aaagccctgc agtctgaccg | gcttgcccgc | ttggccaacg | aaggggcttg | taatgagcca | 540 |
| gtgctgcgcc gtgttgctgt | ggacaagtgt | gcaaggagag | tgcggcaggc | tctggcaagt | 600 |
| gtgagctggg ataccaagct | gatccagtgg | ctgcacacca | cccttgtgga | gaccttgagt | 660 |
| ctgccatgct gcagcctacc | tggatgcttt | gcagacgctg | aaggggaaga | tcccaacctt | 720 |
| gattgaccgg atgcttgggc | atcaacacaa | agactgggct | gcggaactga | ngncttgctc | 780 |
| ttctactgaa naggcctggg | accctg     |            |            |            | 806 |

<210> 302

⟨211⟩ 882

<212> DNA

<213> Homo sapiens

<400> 302

gatagataat agtgtaaaat ggacttgcct tgcttctact gatgtttttc acatgtttcc 60 cgtaactgat acttttcatc agttgtggaa ttcccataat tgcagggatt ccttttctgt 120

cettaggate ceetgaagge ettttaatet tgtteaceaa atgtgtgtte ettgetgaea caaaatggtc tctaccatca gtggtggtac tcttttttcc ccctttgttc aattcaatct 240 caggaacgta tttcctacat taataaatat ttactgagca cctaccaaat gccaagcact 300 tteetagaac aaaagttett ttgaaacaaa aaagtatett ggeagttaag geaaaatgae 360 ctaaagaagt tttaaaatga aaggtotoot atatttoagg gtotttgaga tgaaaccotg 420 caagtagact tacgtgaatg attittgctg tggtaagtat acaaatgcag tgggagttgc 480 cagactttaa aagacgtgaa taacaatcat ataaaatgcc agacattgtt gtggaaaaga 540 gaaagaagat accetactag ggggttttta ceteetttaa gaaacagaet aaaactagtt 600 ttctcaagtg cctgaatata tatggtttaa ataacaatat acaacacttt caaaataaaa totaggaatg titacatatg cittitaatci caaagictaa igiciigaga aaagiaaatc 720 tgtgagatca ctgactcaca gaattttagc aaatagaaaa aatccagtat cttcagaaca 780 caagggctga tettttgtcc cetaceegca agacattget tggtaccaaa atagaaaggg 840 tatttttta agggggaatt atgggttttt ctgaaaacan aa 882

<210> 303

⟨211⟩ 637

<212> DNA

<213> Homo sapiens

#### <400> 303

gtatcaacaa atgcaagtac accacaatca gtgagcagtg tggttcatta tctggcaatg gcactettte aaatagagca gggcattgag eggegtttte tgaaagetee acttgatgee 120 agtgacagtg ggcgttctta taaaacagtt ctggaccgtt ggagagagtc tctcctttct 180 tetgetagte tateceaagt ttttetteae etatecaeet tggategtag egtgatatgg 240 tctaaatcta tactgaatgc gcgttgcaag atatgtcgaa agaaaggcga tgctgaaaac 300 360 atggttcttt gtgatggctg tgataggggt catcatacct actgtgttcg accaaagctc aagactgtgc ctgaaggaga ctggttttgt ccagaatgtc gaccaaagca acgttctaga 420 agactetect etagacagag accateettg gaaagtgatg aagatgtgga agacagtatg 480 ggaggtgagg atgatgaagt tgatggcgat gaagaagaag gtcaaagtga ggaggaagag 540

|       |       |   | •           | .*         |            |            |            |
|-------|-------|---|-------------|------------|------------|------------|------------|
| tatga | ggtag | aacaagatga                              | agatgactct  | caagaagagg | aagaagtcag | cctacccaaa | 600        |
| ccgag | gaaga | ccacangtta                              | nattgccagt  | taaaacn    |            |            | 637        |
|       | t.    | · · · · · · · · · · · · · · · · · · ·   |             |            |            |            |            |
| <210> | 304   | · · · · · · · · · · · · · · · · · · ·   |             |            |            |            | •          |
| <211> | 843   |   |             |            |            |            | •          |
| <212> | DNA   | •                                       |             |            |            | *          |            |
| <213> | Homo  | sapiens                                 |             |            |            | •          |            |
|       |       |   |             |            |            |            |            |
| <400> | 304   |   |             |            |            |            | <i>'</i> . |
| accaa | gttgc | ttaacttcgt                              | tgagcctctt  | taggggatga | tccatgccct | aagctgcctg | 60         |
| actgc | ccaaa | agcagaacaa                              | tgatgagcaa. | tcatttagac | gagataagca | cctggagctc | 120        |
| cagge | attgc | ctaataaccc                              | tgaattattc  | aatccttcat | ttcacagaca | ttgattgact | 180        |
| gggat | ttaaa | acaatttaaa                              | aatgaatgtg  | acactggccc | tgccctcaaa | gagcttaaga | 240        |
| gccat | ctagg | tacacaggac                              | atgcccatgc  | acagctgcaa | aataaggcag | ggtgtgtata | 300        |
| atgta | tgctg | ggggtggaag                              | aaccagggaa  | agttgtcttg | gcagaggtgg | catggcagaa | 360        |
| ataag | caggg | aggctactcc                              | aactggagga  | gatggctgga | gcagggtttg | ctcctgagtg | 420        |
| acgag | tagat | gaggttggct                              | ggagcagatc  | tttggaagga | cctgggaagg | gtttgggggc | 480        |
| ggggg | tggac | tacagagttg                              | gagctaggtg  | gtaaggggcc | ttaaatgtca | ggctaagtag | 540        |
| ccaag | attta | atttagcaag                              | tagcgggaag  | tcatgaagat | gtttgagtca | gagattcagg | 600        |
| tcagt | aacct | gaccaggact                              | gggctttagg  | aagaaagtcc | tctagcatca | taagggacag | 660        |
| attgg | tgggg | gagggtggat                              | ttgaggtagg  | aagaccagtt | gggagtgatg | taattaagtg | 720        |
| aacaa | gatct | aggactagga                              | ttcccaaact  | ttgagcataa | gattcccctg | aagtgcccaa | 780        |
| ctttg | gagat | caaattgana                              | ngtcttgcat  | tttgcccct  | aaggaaatgg | ctttttttt  | 840        |
| ttn   |       | * |             |            |            |            | 843        |
| ·.    |       | •                                       |             |            |            |            | •          |
| <210> | 305   |   | •           |            |            |            |            |
| <211> | 814   | •                                       |             |            |            | •          |            |
| <212> | DNA   |   |             |            |            |            |            |

<213≻ Homo sapiens

#### <400> 305

ttttgttgtt gttacttgtt tgtttgaaat aatattagcc taaatttgac attcacactg agtatcagta agggtcatgg tttttaaacc ttgtgctttc ttattttttt caaactaatt 120 tcagacttaa atagaagtta caagaatagt acagggagtt tcatgtaccc ttcacccaaa 180 ttcctcaagt gttaacattt taccacattt ataggttttt ttctgataca cttgagagta 240 agtttcaggt agatgtccct ttacttctaa atatttcagt gtgtattttc taaaaaacag 300 ggatattccc ttatagaatc atagttttat tatcaaaatc aggaaattta ataattatat 360 gteteateta actatagate ttattagtat tteaetatte ttetaatete tttagageaa. 420 aatggaaaaa aatggttttt ctgttctggt gcaggatcca gcggaggctc acgtgctgta 480 ttggattate acatecttaa tgttetttaa tetgaaateg tteecaagte ttgttattea 540 tgaccctgac tgacattttt ttaagagtaa aaacactagg ggggattttt tgttgttttt 600 tgtttcattt tgttttttgt ttcgttttgt tttttgtctt ttgntttttt ttgagccagg 660 gtotcactot gtoaccoagg otggagtgca atggtgcgat otcagttcac tggaacctno 720 aactneeagg cteaagtgat ecteecacet cageetteee aaggagetgg gactaceagg 780 cttacagnec aacatgeece agettaattt ttgg 814

<210> 306 €

⟨211⟩ 834

<212> DNA.

<213> Homo sapiens

#### <400> 306

tattagcaga ctggaatgaa gatatagaag catttgaaat gatggagaag gatgagctat 60 gacttgctaa acaatctgtt ggtaggtatt taaaaagaaa aggtaaactg tgtgtggtta 120 atagacatcc taatactaag caggctttct aatgggaggc tttaagtatg gtgatgaaca 180 accacgttct gactggcgta gttatcgtag gaatctggag catgctgtgt tagaattgac 240 cttgtttaaa actgtcccat caaaaatgga aatccacagt tcccccttca aatgcagcac 300 tgcaccaccc tgcaacacct caggccaggg aaagattact gagcattcct gcgaaccaga 360

tttctgttgt ctctggatag acaagaaaca aaattcattt agtagtggag tggggaatag 420 gagtttggat agccttctaa ttaaaggaag ctcgcctttc ttggttttgg gggttagagg 480 ctcttttggg aagatgcatc cgagtattgt ggcattctga ttatgctgcc ttcacaaaac 540 actctaagtg acctaagtgg ttatgaagca aatgcattta tggtgaaaac agtctttgct 600 cattgctttc tcttgtttca tttagtgaca aatgatcaag atgacttgat ttttttcct 660 tcttaacaat ggcttttta tttaaaccaa aggtgaagcc agtgtacttt ctcagtgagt 720 tctctgcata aagactaatc agtgggacca ggtaaaaaan ggcatataat acattggggg 780 anattgctta ctttaatact tctggaaaaa tggganttaa gggaagaaac ctgg 834

<210> 307

<211> 769

<212> DNA

<213> Homo sapiens

#### <400> 307

| gttcata | aaca | actccaagca | tggacggaga | gcaagaagac | tcgatccatc | ggaagctacc | 60  |
|---------|------|------------|------------|------------|------------|------------|-----|
| ccctgc  | atca | aagccattag | cccgagtgaa | ggctggacca | caggaggagc | catggtcatc | 120 |
| atcatc  | gggg | acaacttctt | tgatggtctc | caagtggtgt | ttgggactat | gcttgtatgg | 180 |
| agcgago | ctaa | taacccctca | tgccatcaga | gtacagactc | ctcccggca  | catcccaggc | 240 |
| gtggtag | gagg | tgacattatc | ttataaatct | aaacagttct | gcaaaggagc | cccaggaagg | 300 |
| ttcatt  | taca | cagcattaaa | tgaacccacc | atagactatg | gcttccagag | actgcagaag | 360 |
| gtcatco | ccta | ggcatcctgg | agatcctgag | agattagcta | aggagatgct | gttgaaaaga | 420 |
| gctgcag | gatc | tagtggaagc | tctttatggc | acaccacaca | ataaccagga | catcattttg | 480 |
| aagcgag | gccg | cagacattgc | tgaagctctc | tacagcgtcc | ccaggaatcc | cagccagctt | 540 |
| ccagcco | ctct | ctagctcccc | agcgcacagt | ggcatgatgg | gaatcaactc | ctatggcagc | 600 |
| cagctt  | gggg | tcagcatctc | agagtcaaca | caaggaaata | atcaagggta | catccgcaac | 660 |
| acaagca | agca | tctctncgcg | gggatactct | ttcagcttca | cgccttnaac | agtctaanta | 720 |
| cagtac  | cctt | cagcaaccag | tatgaatggg | tacagcaatg | gtcccatgg  |            | 769 |

<210> 308 <211> 567 <212> DNA <213> Homo sapiens

⟨400⟩ 308

60 aaaaactccc tgctagagag actaggagat ttggggctgc ggccgtttcc tccggagcac 120 ccacgggact gtgtgctggg gtccctccac cggctgtgtc ctttattctt ctttctcacc caacgattta cctgaacggt tataaagtgc acgttatttc cctaagcact ttgagtatat 180 240 tggcccactg cattctggac ttcaaaattt ctgatgcgaa atatgctgat acttttgttg aagaaatctg ggctttgagc atctgtaaga tatttgttgg aaggttttgt ctggtccttc 300 360 ttactgatgt gttgctcttc ttcatggctc gtgaaaacta ttagagtcat ccaaggntgg gaagagagat cagcaacgtt aactgggtgt caagaaaaca taccgagatt gaagccatcc 420 acttetgeag gaacaccgaa aagaaagett acaatetgaa ggtgteegtt ettacaetgg 480 teagaceact gteettgggg cagetggggn ctttgggace etecaeeggn etegeeggte 540 cgncggactt ttggctgaga tccgtgt 567

<210> 309 <211> 748

<212> DNA

<213> Homo sapiens

<400> 309

gtcgccgcc ggccgccgt gagccgcatg gagccccgg cggcggacg ctgcttcctg 60 ggcgacgtgg gtttctgggt ggagcggacc cctgtgcacg aggcagccca gcggggtgag 120 agcctgcagc tgcaacagct gatcgagagc ggcgcctgcg tgaaccaggt caccgtggac 180 tccatcacgc ccctgcacgc agccagtctg cagggccagg cgcggtgtgt gcagctgctg 240 ctggcggctg gggcccaggt ggatgctcgc aacatcgacg gcagcacccc gctctgcgat 300 gcctgcgctt cgggcagcat cgagtgtgt aagctcttgc tgtcctacgg ggccaaggtc 360

aaccetecce tgtacacage gteeceetg cacgaggeea gettteeceg eeteetgage 420
accetggett egacgeetg gateaactga geeaggtgga acteetggg gacatggate 480
geaatgaatt egaceagtat ttgaacacte etggeeacee agaeteegee acaggggeea 540
tggeeeteag tgggeatgtt eeggteteee aggtgacace aacgggteee acaggageea 600
geeteatete egteetgget gatgeeacgg eeacgtacta eaacagetae agtgtgeat 660
agagetggag gegeeeegte eggteaagee ettggegeee tttteettet ttgtgeeett 720
gaantggeaa naaggaacee gtneeagg

<210> 310⋅

<211> 800

<212> DNA

<213> Homo sapiens

#### <400> 310-

atcttctcct ctctgcaaac ctctcctgtg ctgatgcctg ggcaccagag atgaggtggg agcagtacct gccctaggcg gggctcacgg tctagtgccc acagcagctg tccagggagt gcaggctgaa gcagtgagat ggcagggggg acggagtgag aaaagagcct ctcagaaggg 180 caggagggc ggggagggc ggggtggcac atggagctgc caggaacccc agaggcagct 240 ctgttcccag agttcagaaa cctccaagaa aagctggtgg cattgtccgt tttgttgttt 300 gcctatctgg cctttggcta ttgactggat ggcatcttgg gaatcctctg aagggctgga 360 gtttacccca agcacaggga cagagggagc aggtggagtc acttctcgtt gatgtccagc 420 tgagctgggc tggtggctgc ctcagaaggg agggggcagc tactaggagc agcagcctca 480 ccccagggct ctgtggacct ccttagcctg tgatggcctt ggcaatgggg atggcctggt 540 tgggggactg agcaaaaggc aggcagtagg gatgggtgtt cccagccttg agtcagatcc 600 tgagaagctc cagggcggng cacgttctgt ctctgccatc tggaaaccta ccagctacag 660 caattggcac cttcaacaag aacccctgag cccggaagct tggtgagagg aaccttcagg 720 tcaactnttc accacacaga ccaagtctgc tgatctgngc cattccctga tgcactgggg 780 800 catheegtga eccagaetgt

<210> 311 <211> 577 <212> DNA <213> Homo sapiens

#### <40.0> 311

ggaatgcatg tacattetet gatattatte ettatateet egggggatgt gaettetaat gtcacacage gtgttetece tgtgttetet tteataatat eetagtgeaa ttgtaetett 120 180 aatgacgcag ggggtgtagg cattgtgata ttattcatgt tattctagaa ggatgctact cctaatgtca caggggtgta caccctgtga tagtattcat aatttcccag gggtctatac 240 tectaatgte acagaagata acaecetgtg acattatteg taatattetg atgagatgat 300 tetectaata teacaggggg tgtacaccet gtgataatat tettaeteet eeagggggat 360 420 gtcactctta atgtcacagg tgtgttcctt ctgtgatatt attgaaaata tgctagctgg gtactactac taatgtcaca atgcgtgtac accttgtgat attattagta atattgtggg 480 gggatgttac ccctaatgtt acaggggtgt acaccgngtg atattgctcc caatattgna 540 577 nggggatgct actcctaatg tcacaggtgg tgtacag

<210> 312

<211> 766

<212> DNA

<213> Homo sapiens

#### <400> 312

gtgttccggc cgatcccacc tcttctcgac cctggacgtc taccttccgg aggcccacat 60 cttgcccact ccgcgcggg ggctagcgcg ggtttcagcg acgggagccc tcaagggaca 120 tggcaactac agcggcgcg gcggggggg cccgaaatgg agctggccg gaatggggag 180 ggttcgaaga aaacatccag ggcggaggct cagctgtgat tgacatggag aacatggatg 240 atacctcagg ctctagcttc gaggatatgg gtgagctgca tcagcgcctg cgcgaggaag 300 aagtagacgc tgatgcagct gatgcagctg ctgctgaaga ggaggatgga gagttcctgg 360

gcatgaaggg ctttaaggga cagctgagcc ggcaggtggc agatcagatg tggcaggctg 420 ggaaaagaca agcctncagg gccttcagct tgtacgccaa catcgacatc ctcagaccct 480 actttgatgt ggagcctgct caggtgcgaa gcaggctcct ggagtccatg atccctatca 540 aggtggtcaa cttccccag aaaattgcag gtgaactcta tggacctctc atgctggtct 600 tcactctggt tgctatccta ctccatggga tgaagacgtc tgacactatt atccgggagg 660 gcaccctgat gggcacagnc attggcacct gcttcggcta ctggctggga gtctcatctt 720 catttattnc ttgctactgt gcaacgcca gatcaccatg cttgna 766

<210> 313

**<211> 799** 

<212> DNA

<213> Homo sapiens

#### <400> 313

atcataaaaa cacgcctttc tcattcaact gaaaaacaca ctaaaatttt aaaagagaaa aatgcaacat cttggaaagt aacgttttaa caccataaaa atttgcactt attcaactga 120 aaatttacac taaaatagac attaactgtg cttttacatt ccaaaccatc atactaaaca taacaagtta attgccaatg ttttccttcc cctatacttt gaggtagttc tacgtaacca 240. actataacaa atttacttcc taacatcctc aatcttctgc tctcctttag ttttaagata 300 ctttatgaca tgggtaatac tctgaaatgg atgccttctt tggatatatt ttggggtttt 360 agtgtctgga ggactttgat ttctatatta gcatattggt ttatgaagtc tggacataac 420 ctaaggaaaa taatcacttg ttttaaagga cagttctttc aaattcccta caatgtcaga 480 tttagagcca aataccatcg aatatgttga tgctgtaatt cctagcaaat ttcaagaggt 540 cactetettt teaaaattat acegtgeece ttetttgaaa atgagtttea ttttegaagt -600 caaaacaagt cetttetett ceaetggegg gecettetgg teeceagatt ageetgttee 660 aaaattggtc atgtgtctca ctgggcccct tcagttgacc cagcgtcctc accagctcct 720 atccatctct atctgctgga aaggctttga ggtttcagat ttangacagc accactcatt 780 799 catggnetet netgeatea

<210> 314

<211> 828

<212> DNA

<213> Homo sapiens

# <400> 314

| cccttgaagt | tttgtgccag | ccttcttacc | taattaaaca | acacttcagc | agcgtggttg | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ctaatgccag | gtaaccacca | tgtgttatgt | tagcctgctt | ggatcaattg | taattattac | 120 |
| tggaattgaa | ttaattaata | tgattttgaa | cagttcatgt | tcaaactaac | atcctgtaaa | 180 |
| gtagacactg | caaggagtta | ctgatgaaag | aaaagttgtt | cataaaagaa | gcctcctttt | 240 |
| ataattgact | tgccttagac | ttatttaata | atgtttcata | gtattttta  | aaaagtatct | 300 |
| gaaccttgta | catatttaca | attatgagac | atcctatcta | aaaatttata | ttttcgattt | 360 |
| aacatttgtg | gctggcagtg | ataattttta | ctctctggta | ctatgaatca | tctcattaaa | 420 |
| atcctctcaa | ctgaatgaca | ttatcccaat | ttgcaaatga | aagagagaca | gagaacctaa | 480 |
| tgatttgccc | ctggtctata | cctggtactt | ggaggtagga | ttcaaagcca | ggcagttctg | 540 |
| actccagagg | ctgtgctctt | aaccactcta | tacattacct | ctcaaaatag | aagattaatt | 600 |
| ggactcaagt | gaaattgctt | gtataatttt | taatcaaaac | tatatgctgg | ccacattaac | 660 |
| ttctgtgctg | tcatcatgat | catagaataa | taacaacact | caatttattt | ctctatacta | 720 |
| ataactttga | taaaatgnta | ttatttatta | aatctatttt | tcagaaacca | aaaaacagta | 780 |
| aacatgagtc | aagatgaatt | aaaaggataa | gccaattttt | aaggncna   |            | 828 |

<210> 315

<211> 807

<212> DNA

<213> Homo sapiens

<400> 315

gtgggccaca aggctacagc tgccactgtc gcctgggttt ccggccagcg gaggatgatc 60 cgcaccgctg tgtggacaca gatgagtgcc agattgccgg tgtgtgccag cagatgtgt 120

tcaactacgt tggtggcttc gagtgttatt gtagcgaggg acatgagctg gaggctgatg gcatcagctg cagccctgca ggggccatgg gtgcccaggc ttcccaggac ctcggagatg agttgctgga tgacggggag gatgaggaag atgaagacga ggcctggaag gccttcaacg 300 gtggctggac ggagatgcct gggatcctgt ggatggagcc tacgcagccg cctgactttg 360 ccctggccta tagaccgage ttcccagagg acagagagec acagatacce tacccggage 420 ccaectggcc accccgctc agtgccccca gggtccccta ccactcctca gtgctctccg 480 540 tcacccggcc tgtggtggtc tctgccacgc atcccacact gccttctgcc caccagcctc ctgtgatccc tgccacacac ccagctttgt cccgtgacca ccagatcccc gtgatcgtag 600 660 ccaactatec agatetgeet tetgeetace aacceggtat tetetetget eteatteage acageettet geccaecace ecetatgate teaaceaaat ateeggaget tttteettge 720 780 caccantece catgitteag acacconggi egetggeace canaccacca cicatitiges 807 ttggaattcc accttaacca tgcccct

<210> 316

<211> 846

<212> DNA .

<213> Homo sapiens

#### <400> 316

agegeageta tggetgetgg egtaceetgt gegttagtea ceagetgete etcegtette tcaggagacc agctggtcca acatatcctt ggaacagaag atcttattgt ggaagtgact 120 180 tccaatgatg ctgtgagatt ttatccctgg accattgata ataaatacta ttcagcagac atcaatctat gtgtggtgcc aaacaaattt cttgttactg cagagattgc agaatctgtc 240 300 caagcattig tggtttactt tgacagcaca caaaaatcgg gccttgatag tgtctcctca tggcttccac tggcaaaagc atggttacct gaggtgatga tcttggtctg cgatagagtg 360 tctgaagatg gtataaaccg acaaaaagct caagaatggt gcctcaaaca tggctttgaa 420 480 ttggtagaac ttagtccaga ggagttgcct gaggaggatg atgacttccc agaatctaca ggagtaaagc gaattgtcca agccctgaat gccaatgtgt ggtccaatgt agtgatgaag 540 600 aatgatagga accaaggett tageettete aacteattga etggaacaaa eeatageatt

gggtcagcag atccctgtca cccagagcaa ccccatttgc cagcagcaga tagtactgaa 660 tccctctctg atcatcgggg tggtgcatct aacacaacag atgcccaggt tgatagcatt 720 gtggatccca tgttagatct ggatattcaa gaattaccag ncttaccact ggaggaagag 780 atgtggagaa ttttgaaaga ctcttttcaa agttaaagga atgaaagaca agcttgnacc 840 tttctn

<210> 317

⟨211⟩ 785

<212> DNA

<213> Homo sapiens

#### <400> 317

ttactaaaat ctaaattgag tactttttac tgttgcagag aattaagtca ctaaacgtta 60 tttagataca tagatgctag ttgcaagtaa caccettttg taacataaaa gtaaaagcat 120 aataatttee caactttttt etteaaatta aaaaagaaaa tageatataa ttaeeattet 180 tcatttgaga aagctgaaga ttctgatgct taaaaaacttc agaattctaa tattaaaaaat 300 agagtggttc atgtgacatt gaaggettat etetgtaaaa tagtgacaet ggtgagtggt attateteaa tatttttgte caaatteace ttaggaaate aetgtaaate tteattgttt cctaaaagtc attattacgg cataaactta acatactttg atagtagtta gtactgatac 420 gtgacatatt ctaccccgtg tctctattac tctgtctcta ttactgtgaa aagtcacagt 480 aaatttaaca ttttcttcca gactgtgtat gatctttcat tgtaatagag acatggagta 540 ggataagtca tgtattaaca tgtaagattt ttttaacctg ctccctcagt tttatagatg 600 660 agacaaagat aaggttgtaa gagctaatct cttcaagtag gcagtactag taagttgtca tgcgtggact gaactcctgg cacttctctc tcttaacttc aatccataga gaagcccct 720 780 tnctgccttc cagtattatt tagcagagga gaaaatcnta ttangctgtt ggaactggtt 785 gccta

<210> 318

<211> 682

# <212> DNA

## <213> Homo sapiens

# <400> 318

| aagtctagtt | aaactttaaa | caaaggattt | atgaacatct | ctacttccct | cagtgagttt | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ttttttttt  | aacaagtaat | attttcaagg | aaaggaaaat | ggacattatg | atggctgtct | 120 |
| tttgtccttt | tgtaaatggt | ggttcttcta | gagctgtgct | atctaatatg | atagccacta | 180 |
| gtcacatgta | gctatttaaa | ttaaattaaa | aatttagttc | ttcagtcaaa | ataaccccat | 240 |
| ttcaaggttc | agtagctaca | aatggctagt | ggctagcata | ttggaccaca | cagatacaga | 300 |
| ctgttttcat | cattgcaaaa | agttgtatta | aactctattg | tatagaatat | tttgctgaaa | 360 |
| tatagtatat | gtggctgggc | atggtgtctc | acacctataa | tcctagcact | ttgggaggcc | 420 |
| gaggcgggca | gatcacctga | ggtcaggagt | tcaagaccag | cctggccaac | atggggaaac | 480 |
| cgcaactcta | ctaaaaagac | aaaaatttgc | ctggtgtggt | gacgggcacc | tgtaatccca | 540 |
| gctacttggg | aggctgaggc | aggagaattg | ctggaaccca | ggagggcgga | ggttgcagtg | 600 |
| agctgagatc | ataccacttt | actccagcct | gggtgaaaga | gcgaaactcc | atcccatctc | 660 |
| aaaaaaaaaa | aaaannagaa | nt         |            |            |            | 682 |

<210> 319

<211> 847

<212> DNA

<213≻ Homo sapiens

# <400> 319

| accgtggtgc | cgagtgcctg | ctgccttggg | ccgccttgaa | cctccagggt | ttccagctcc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tcctccttca | ccccagtgcc | actgccatga | tggatgtgag | tgaacttggg | gagtctgccc | 120 |
| gctacctccg | ccagggctac | caggagatga | cgaaggtgca | cactatccca | tgggacggga | 180 |
| agaagcgagt | ctgggtgcct | gatgaacagg | acgcctacgt | ggaggccgag | gtcaagtcgg | 240 |
| aggctaccgg | gggcagagtc | accgtggaga | ccaaagacca | gaaggtgctg | atggtgcgtg | 300 |
| aagccgagct | gcagcccatg | aacccgcctc | gcttcgactt | actggaggac | atggccatga | 360 |

tgacgcacct gaacgaggcc tctgtgctgc acaacctgcg ccagcgctat gcccgctgga 420 tgatctatac ctactcagge ctcttctgtg tcaccatcaa cccctacaaa tggctcccag tctatacggc ctccgtagtg gctgcttaca agggaaagcg ccgctcagat tccccgcccc 540 atatatatge ggtggeggae aacgeetaca acgacatget gegeaacega gacaaceagt 600 660 cagaaagang gcggtaccac agtcatttcc caggattgaa tncaaagtgc ttaagccagg 720 780 actittacca cotggagota gigitocagot gaactaaaat iggnoigaca cittociggo 840 cccaattctg aacagatgtg ttcttgatgg gggaatangg aggggacacc cncaaacgga 847 atggccc

<210> 320

<211> 851

<212> DNA

<213> Homo sapiens

#### <400> 320

gattaatgta gacaaacgtc caggtagcaa ttttggggat aataaatgag ttcacccttt, tttttttttt ttttcctga gacagagttt gctcttgttg cccaggctgg agtttaatgg 120 cacgatettg gettaccaca acctetgeet cetgggttea ageaattete etgeeteagg 180 ctcccaagta gctgggatta caggcatgtg ccatcacacc cggctaattt ttgtattttt 240 agtagagaca gggtatetee atgttggtea ggetggtete gaacteetga eetcaggtga 300 teegeecact teageeteec aaagtgetgg gattacagge gtgageegte atgeetggee 360 gagttcagct tttattcaca ttttttcccc gaagtgattt attcttcaaa gtagacagtt 420 atgttctata gagtgttttg ttttttcttt aagaaaataa tttacataaa cagagattat 480 ggtaaacatt ttaaatctta ggctgttggt taaatttaat ggtttaagca ctgttgggtt 540 ctctttaatt aatatttgca gaaggagaac atatgtgttt cactgatatg tatggtccag 600 660 aaaaattact taatteteaa aaatatgttg catteteata ttgtgttagg gaaaatteea 720 taagtagtet attititit tiettitget gaetggtaae atccaaacae etgaatgaaa 780 actgactcat ttctggattg gtgtttaaaa atattgattt gcagatgttc acagaacact

|            |            |            | •          |   |   |     |
|------------|------------|------------|------------|---|---|-----|
| tgcatttttt | ggattcacat | tgctnaatca | aatgtaaang | gcaaatatgn                              | atatttaata                              | 840 |
| aaatgagaag | <b>t</b> . | •          |            |   | · · .                                   | 851 |
| · · · · ·  |            |            | •          |   |   | ,   |
| <210> 321  |            |            |            |   | •                                       |     |
| <211> 722  |            |            |            | ·                                       | •                                       |     |
| <212> DNA  |            |            |            |   |   |     |
| <213> Homo | canienc    |            |            | * | · · · · · · · · · · · · · · · · · · ·   |     |
| \Z137 Homo | Sapiens    |            |            |   |   |     |
| . ,        |            |            |            |   | 1 · · · · · · · · · · · · · · · · · · · |     |
| <400> 321  |            |            |            |   |   |     |
| aaaattacag | gagaaaattg | agaaaaattt | agagtccaag | gctggcacca                              | aagacctgag                              | 60  |
| acctaggaac | atgagagtct | gttttcttca | tgtacaaaat | aaagctacta                              | acacctgttc                              | 120 |
| taacaagact | gacatgatgg | aaatggcaaa | atattaacaa | ttatgccagg                              | cgtaactgtt                              | 180 |
| gaattgttgc | tttctaacaa | ttacttcagt | gcccaataaa | tatcttcacc                              | agaaaactat                              | 240 |
| ttattcaagg | ctggctgtgg | tggctcaagc | atataatccc | agcactctgg                              | gaggccaagg                              | 300 |
| tgggcagatc | acttgggctc | aggagttcaa | gaccagcctg | ggcaacatgg                              | agaaacaaaa                              | 360 |
| tacaaaaata | caaaaaatta | tctgggcatg | gtggtatata | cgcctgtaat                              | tccagctact                              | 420 |
| cgggaggctg | aggcacaaga | atcacatgaa | ctttggaggc | aaaggtagca                              | gcaagctgag                              | 480 |
| atcatgccac | tgcactccag | cctgcgtgac | aaagtgagac | cttgtctcaa                              | aaaaacacaa                              | 540 |
| caaaaacccc | aaaaattagc | tgggtgtggt | ggcacacgcc | tatggtccca                              | gctacttggg                              | 600 |
| gggctgaggt | ggaaggattg | cttgaaccca | ggaggtcgag | gctgcaataa                              | gctgtgatta                              | 660 |
| tgccactgna | ccccagcctg | ggtgacaaag | tgagaccctg | tcttcccca                               | aaaaaaaaan                              | 720 |
| cn         |            |            |            |   |   | 722 |
|            |            |            |            | *                                       |   |     |
| <210> 322  |            |            |            |   |   |     |
| <211> 813  |            |            |            |   |   |     |
| <212> DNA  |            |            | •          |   |   |     |
| <213> Homo | sapiens    |            |            |   | •                                       |     |

<400> 322

aatgaagaac agctggaaga tatgagacag gaacttgtac gacaatacca agaacatcaa 60 caggcaacgg aattgttaag gcaagcacat atgcggcaga aggagagaca atgaccaaga 120 cagacaagag ctcgagtggg gctaaaaaga aggacttctc cagcaaggga gccgaggata 180 atatggtaac gagctataat tgtcagttct gtgacttccg atattccaaa agccatggcc 240 ctgatgtaat tgtagtgggg ccacttctcc gtcattatca acagctccat aacattcaca 300 360 agtigtaccat taaacactigt ccattetigte ecagaggact ttgcageeea gaaaageace 420 ttggagaaat tacttatccg tttgcttgta gaaaaagtaa ttgttcccac tgtgcactct tgcttctgca cttgtctcct ggggcggctg gaagctcgcg agtcaaacat cagtgccatc : 480 agtgttcatt caccacccct gacgtagatg tactcctctt tcactatgaa agtgtgcatg 540 agtoccaago atoggatgio aaacaagaag caaatoacot gcaaggatog gatgggcago 600 agtotgtoaa ggaaagcaaa gaacactcat gtaccaaatg tgattttatt acccaagtgg 660 aagaagagat ttcccgacac tacaggagag cacacagctg ctacaaatgc cgtcagtgca 720 gttttacage ttgccgatte ttcagtcact actggageae tttaacactt gttcacttge ' 780 caggaaccag gacatnactn caggccaacn ggc 813

<210> 323

<211> 836

<212> DNA

<213> Homo sapiens

#### <400> 323

attgttattc caataggaaa agcattttat ctcttcactt tagcctttgc tgagtattgt 60 acaaaaagaa tgatgctgca ctaaataatg aacttctttt tgaagaattt aacaactaga 120 tgcattttgc cttcctggaa tccttttgtc tgtctctttg catcgttgac tcttgcttat 180 240 ccagagatet cagettaaat attteettaa aggtaeettt eetgagatte cagetggaat 300 tgagtcccct tagtatactc tgccatatca cctcttgcag tttataatta cccagctgtt tgtatgaatg ttatgtctgt gtctcacatc acactttgaa tttcagagag agcagtggcc 360 atgtctgttt cggtcactgc tctataactc cagtgtctct cataacagtc tgggaaataa 420 480 taagtactaa ttaagtatti gitaagigga aatacigcig tiagagciic icciaattag

agtgttaaaa atgagataat gtgtgcatgg gggaaggga aggaaggga gaggaagtag 540 ataaacttgt gatattaccg tgagataatc ctcaagtaag tcctctcacc tccaggcct 600 ttgtttcacc ttgnctgtaa aataggacag actgggttca agatgccatt aatatcctat 660 attttgattc cagtaacaat gatgacagat tatgtaagct catttgaatg gaatatgtga 720 cagctagctn cccaaaagaa tatttgacag gtctaaataa acatattaga aatgcttgcc 780 aactagatga tattatttan agcctcgtac ccctggtaga aacaagcctn tntaat 836

<210> 324

<211> 809

<212> DNA

<213> Homo sapiens

#### <400>, 324

ttttttcttt tttttaagag atggaagggg gtgggtctta ctttgtcacc caggctggtc tegaacteet gggeteagge atgageeace atgeetggee caatttttga attttteaa 120 aggttctcac tgtattgccc agaatggtct cgatctccag atgtgaagtg atctttccca ÷180 cttggccgcc taaagtgctg ggattacacc gcacctggcc catgcttttc tttaaggaag 240 atagattacc ttatttctct cagtttttat gatagccgta tacctgcaaa gttccatctt ccatttcaga ttattttgtt tttattttta attctttcag tgtatgctgt gtctgttaac 360 ttgaagtaag gataataatt tcataccttg cttatgctct ccctttgtgg tgaaatcatt 420 480 atactacttt tetttettt gtttttett caacttttat tttaaattee egggtaegtg tgcaggtttg ttacataggt aaatgtgtgc catggtggtt tgctgcacag atcaacccat 540 600 cacctaggta ttaagcccag catccattag ctattcttcc tgatactctc tctccctctg cccctttgta ctacttttca ccattatgat ttttaccata tccacctgcc agttttacag 660 720 ttgataaatg caaggctggg gaacaaagtg agacccccca tctctaccaa ataaaaattt ctaaattagc catgtgtggt ggtaaacacc tggggtcccg gctgcttggg gctgangcag 780 809 gangattgct tgagcccaaa gtcnaggct

<210> 325

<211> 844

<212> DNA

<213> Homo sapiens

<400> 325

| aaaaaaaaat ggctco | ctccc agccttgtg  | tgtcctcccc   | tggccaaggc | ccggcttcac | <sub>,</sub> 60 |
|-------------------|------------------|--------------|------------|------------|-----------------|
| catggagctg gtgccg | tgct cacgggcct   | t cccagttccc | acacctctct | tctcatagct | 120             |
| agtggctcca gtgccc | ctgc aggccaacc   | gtaacaactc   | agctcccaag | ctgaccctta | 180             |
| cctgtctgta aaagcc | cttcc cttccaatca | a gcatccggtg | tttataacca | catcctgagc | 240             |
| caggtgtggt ttcccc | cagaa atgctaccc  | cttgacatgc   | tctatccacc | ttgatcacac | 300             |
| ccctcaccgg ctcttt | gacc tcctcaaaa   | ctccctgcag   | aactcctcct | tgtcttctca | 360             |
| ctctggcagc caccco | etgte tteacttee  | t tctttacctg | gctccactga | gagacctgag | 420             |
| ccctggggaa tgcagg | tgtt gtgccccc    | t ctgccctccc | actggcccag | cccttggatg | 480             |
| catcattaga gatggg | gtgcc agctcacati | g aggacccact | accttggctc | ggccctcttc | 540             |
| ctgcattcat ccttct | taggg gccccagtg  | a gcacacaggt | tcttcaggaa | aaatgcagct | 600             |
| ccttacccct cctctt | tcagc acctgcttt  | t catagagaac | cctncttcta | tcttgcatgc | 660             |
| atgacagggg tcccgt | tgggg ccatgcacc  | agcttccttc   | tctctcctgg | catgttncac | 720             |
| ctgggggtgg aagaac | etgcc atttccatc  | t cttcagagct | ctttcccagg | aacccttcct | 780             |
| tctaggcatg gttctg | gtgnc ctttgtctt  | c cttagcacag | tgccaatctg | attttctctt | 840             |
| tctt              |                  | • •          |            |            | 844             |

<210> 326

<211> 831

<212> DNA

<213> Homo sapiens

<400> 326

atacgactat gactattct gcagtaatta ttattgagac ttactataat aatgataagg 60 ctgtatataa attatacctt actaaaaatt taaaatctag gaatttactg agagagcata 120

aagtatggtt gtaatagaga aaacaaatga ttgaaatggc ttaaatgcaa gcctttaata 180 ttaattttga gtattttaac gcaaataaaa ccaattatga cagtgtgctc aaattggtaa 240 acaaccaate tgtgacttta tgaaaatata tttatgacag tcatacttgc cttactctta: 300 agtgtagtat ttgtccttaa gttgggagca ccataaatta attttaaagc aaaacatatg 360 acceteatee aatgitttaa atgaattget teetaetagg aaaacaaaac ateteaggae 420 atcaaatact tetagtaate aagatgtttt gtttaaattt getaatgtaa getteaacte 480 tatttggttg cactttaaaa aagcatacta gaaaatgggg aatatttgaa acatgcattt 540 ttaaaagcta ggtgttatct tactcagaag atgttaaaag cttctttata cattttattt 600 gaaagtaatt tccaaaaaag ggatgcttgg tgggtatatg aaaaggtgtc agtatcacta 660 atcatcangg aaatacatat caaaaccata atggaatatt acctccagct ggtaggatgg 720 cttttatcaa aaagaccaaa aatnacagta ttantgagac tgtggaagaa aaagaaccct 780 tacacccact gataggaatg natatcagta taggcttatt aaaaaccctt t 831

<210> 327

<211> 834

<212> DNA

<213> Homo sapiens

#### **<400> 327**

attetgaaag tittetgaet eeatatitee aagaaaetig teecaeteet taatatitea 60 120 taatettete ttttetaett aeggettgtt aaagagaeeg gtaaetggtt etaatgtttt 180 240 gaaatetgea tgettaeeaa tgatgtette atgagttage tgtaggetaa tggaaaaagg 300 aagettatea taetttttag aaetttttat aattaaggte agaeetetat attattatta atattacacc tcagtatttg caattaacat tgagacatcc ttgcaacaaa ccctttggat 360 420 attaacaaat attgacacac atataggaat atattaaaaa teettattaa ggggaacacc aattagaate accataaatg atgittatae atticateaa geaceaagag geeataaatt 480 540 atttggatga gattagccac ctaaatgatt acatgaaatg accttagata ccaattttgt 600 tgaacaagct ttccacagta cttatcattt actcatacac tattaaaagt ttgacattca

ggatattage tacaactett ggttatatgt gagagaaact caactecaac tagcaaagaa 660 ggaaattaat ttattggett atetaactge aaagtecaca etgtaggget gattecaage 720 acagetagat ecagangeta acataatgge ateaggacte tgnetetete ttteagteee 780 ttgcaagget acttecataa genttaatgg attgeteaaa ggeageeetg aagt 834

<210> 328

<211> 796.

<212> DNA

<213> Homo sapiens

#### <400> 328

gaattgcaac ggcagctgcc gggcgtatgt gttggtgcta gaggcagctg cagggtctcg ctgggggcca atcgggacca attttgagga ggtacttggc cacgacttat tttcacctcc gacctttcct tccaggcggt gagactctgg actgagagtg gctttcacaa tggaagggat 180 cagtaatttc aagacaccaa gcaaattatc agaaaaaaag aaatctgtat tatgttcaac 240 tccaactata aatatcccgg cctctccgtt tatgcagaag cttggctttg gtactggggt 300 aaatgigtac ctaatgaaaa gatctccaag aggtttgtct cattctcctt gggctgtaaa 360 aaagattaat eetatatgta atgateatta tegaagtgtg tateaaaaga gaetaatgga 420 tgaagctaag attttgaaaa gccttcatca tccaaacatt gttggttatc gtgcttttac 480 tgaagccagt gatggcagte tgtgtettge tatggaatat ggaggtgaaa agtetetaaa tgacttaata gaagaacgat ataaagccag ccaagatcct tttccagcag ccataatttt 600 aaaagttgct ttgaatatgg caagagggtt aaagtatctg caccaagaaa agaaactgct 660 tcatggagac atagagtctt caaatgttgt aattaaaggc gattttgaaa caattaaaat 720 ctgtgatgta ggagtctctn taccactgga tgaaaatttg actgggactg accctgagct 780 tgtcattgca cananc 796

<210> 329

<211> 692

<212> DNA

### <213≻ Homo sapiens

### <400> 329

| actgggcggc | ggaagttcga | cggcgccggg | cgagtggctg | ttgagcggcg | ccgcgggagt | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tccgcaggtt | tcccgtgttc | gcagcggagc | cggaggccag | ctgaacccgg | ccgtgggatc | 120 |
| ccggatagga | ggaggagggg | acccatagga | cgcgttaaca | tggacctgga | aaacaaagtg | 180 |
| aagaagatgg | gcttaggtca | cgagcaagga | tttggagccc | cttgtttaaa | atgcaaagaa | 240 |
| aaatgtgaag | gattcgaact | gcacttctgg | agaaaaatat | gtcgtaactg | caagtgtggc | 300 |
| caagaagagc | atgatgtcct | cttgagcaat | gaagaggatc | gaaaagtggg | aaaacttttt | 360 |
| gaagacacca | agtataccac | tctgattgca | aaactaaagt | cagatggaat | tcccatgtat | 420 |
| aaacgcaatg | ttatgatatt | gacgaatcca | gttgctgcca | agaagaatgt | ctccatcaat | 480 |
| acagttacct | atgagtgggc | tcctcctgtc | cagaatcaag | cattggccag | gcagtacatg | 540 |
| cagatgctac | ccgaggaaaa | gcagccagta | gcaggctcag | agggggcaca | gtacccggaa | 600 |
| gaagcagctg | gcaaaagcag | cttccttgca | catgaccagg | accettcaaa | gtgccatgag | 660 |
| ttgtctncca | gagangtgaa | ggagatggan | ca         |            |            | 692 |

⟨210⟩ 330

**<211> 743** 

<212> DNA

<213> Homo sapiens

## <400> 330

| tgacaataaa | tattctagtt | aaaaatatgg | gctatggcac | agtggcccac | gcctgtaatc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ctaacacttc | aggaggccga | ggcaagtaga | tcgcttgagt | ctgggagttc | tataccagcc | 120 |
| taggcagtat | agcaagacct | catctggaca | aaaatttaaa | aaattagctg | ggtatggtgg | 180 |
| ttcatgtctg | tggtcccagc | tatgtgggag | cattgcttga | gctcaaaagg | tcgagactgc | 240 |
| agtgagccat | gatcctgcca | ctgcacttca | gcctgggtga | caagagtgag | accccatctc | 300 |
| caaaaaaaca | tatatataaa | taaaatatgg | gccgggcaca | gtggctcaag | cctgtaatcc | 360 |
| caggacttcg | tgaggctgaa | gtgggagggt | catttaaggc | cagaagtttg | ggaccatcct | 420 |

gggtaacata gcgagaccct gtgtttacaa aaaatttaaa aattagccag gtattttggt 480 gcaggtgacg gcggggacag gggtatcagt ggggtgaggt aggaggatcc cttgagccaa 540 gaggttgaga ctgcagtgag ccatcattgt gccactgtac tctagcctgg gcaacgagcg 600 aaactccgtc tcaaaaaaca agaacaacaa caacaaaaaa aaccatatgt aagggtaact 660 cgggaatggg aaaagccaag tacttaagga tcacaaagct ggttttgccc ttttgggggn 720 tctngggaaa tgnccttggg aaa

<210> 331

₹211> 830

<212> DNA

<213> Homo sapiens

#### <400> 331

ttgcaatgta aaaatatatc ttggtctctg catgatgata tattaacatc tataccatgg 60 aacttttaaa aggaaaattg tgtggtataa ttaaaagaat attgcatgtt atagagaaac 120 ttcacctgtt gatttagcag gtgccattgt gtagatgcta agcaaatctt aatatgtttc 180 cttggatttt tgaaatttga atttgttgtg taactttgct agttaaaaga tttagaggga 240 tttggctggg cgcatggctc acgcttgtaa tcccagcact ttgggaggcc gaggtaggca 300 gatcacgagg tcaggagttc gagaccagcc tggccaatac agtgaaaccc tgtctcttct 360 aaaaatacaa aaattagctg ggcctcgtgg cgggcgcctg taatcccagc tacttgggag 420 gctggcagga gaatcacttg aaccagggag gtggaggttg caatgagccg agatggcgcc 480 540 gatttatcat agittititt tettaaetgi tattgaetai tittaaitti tattittaa 600 ttcagtggcc tctcaggatt attacctgca tttttttttc aggaaaatcc caattctgca 660 actaactetg nggeettaga caagtetett geettateea gggetggtte ettggetgta 720 780 aaataaagag ttggctagat gatctctaag gtccctttta catctatagg ttnccttggg 830 acctatatta ggggttgatc caaaccantt taatatatct taancccgtt

<210> 332

<211> 891

<212> DNA

<213≯ Homo sapiens

#### <400> 332

| ataatatgtg | caaaatcctt | aacatcgcat | tgaaagattc | tttggatctg | atcttaccat | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| atatttctag | cctaattaat | cttctacatt | taccctgcca | gttctctgtt | cctactcatt | 120 |
| gattccctaa | caatgtaagc | agagttcctt | tgttaagtca | ttcacagaaa | gttttcccta | 180 |
| ttcttctcta | tctgaaaaaa | aatgtcctct | atccttggag | atctaaccca | aagtccatga | 240 |
| agcattttac | tgatactttc | attttctgtt | gcagcacttg | ctatttcttt | tatgccatgg | 300 |
| agtgggcaca | ttttgtattt | gtgtcttgta | ttattgtgac | ttgatccttg | gattggatct | 360 |
| tattttactt | ttgatgtatg | tggtagtcag | aggcctacca | acagatagaa | cccacacagt | 420 |
| aatttggaga | aagttttaca | taaagaataa | gtagatataa | tacagtattt | atgtaatgga | 480 |
| agattagcta | gtaataacta | aagaggagtc | taaagaatat | agtaataata | attataagga | 540 |
| gaaaccattg | cctctgaagc | tgagaggtac | ccaaaaagaa | cctcttcatc | ccctgcaagg | 600 |
| ctgatatcca | aactttattt | gtgaggacat | gcccgtggct | cactggctgg | tggacaaatt | 660 |
| gctgaggtgc | tggaacagca | ggacttgntg | gaaatgtttt | cctctgggat | tccaaataag | 720 |
| tcacccatag | gggaggatcc | taacccagca | agcactcctc | ttcaaaggcc | atcttaaggg | 780 |
| gtgccatctt | cgtagaaggt | gccttcaatt | ggccaaccac | tttnactggg | ntaatgccta | 840 |
| tcctggaaaa | gggtnaatgg | gaaaaatgct | attccccaa  | gggagacctg | g          | 891 |

<210> 333

<211> 815

<212> DNA

<213> Homo sapiens

<400> 333

tttttttcg ctcgtgtccc gccgggtggc gctcaccacc tccccggaac acgcgagtct 60 cctgtcgcgg ttccggtcgg aattaccccg tggagcacgc cgatatggct gcgctgacac 120

180 tgaggggtgt ccgggagctg ctgaagcgtg tggacctcgc gacggtcccg cggagacatc gatataagaa gaaatgggct gccacagagc ccaaattccc tgctgttcga ctggctttgc 240 agaattttga catgacttac agtgtgcagt ttggagatct ttggccatca atccgtgtca 300 gtctcctctc agagcagaag tatggtgcac tggtcaataa ctttgctgcc tgggatcatg 360 taagtgctaa gctggagcag ctgagtgcca aggattttgt gaatgaagcc atctcccact 420 480 gggaactgca gtctgagggt ggccaatctg cagccccatc ccctgcctcc tgggcctgca gtccgaacct tcgatgcttc acttttgaca gaggggatat cagtcgcttc cctcctgcca 540 gacctggcag cctgggtgtc atggagtact acctgatgga tgctgctcct tgctgctgtt 600 660 ctggccctcg gcctgcagcc tggggacatc gtgcttgacc tatgtgcctg aagagatcan ggatggaaat caagttcgag ttacctcatg ggatggcagg aaatggggag aactggagg 720 ggacacctat gaccgggttg ctggtggatg tgccctgtac cacagaccgc acttccttta 780 815 tgangaggag aacacatntt taaccggnca aggaa

<210> 334

<211> 801

<212> DNA

<213> Homo sapiens

#### <400> 334

gaatactttg gatgagacgg gaggttttcc cattctgatg ctaggatctt gttcatgagt 60 taatgaagac agttgaggaa ggtaaggagc tatttctact tgattagtga ggcttcagtc -120tatttcaaca tttcaaagtt tttcatgata atttgttcat gaaaaaaaaa agaaaacaga 180 240 ggagttgctc cagctctaaa aaaaatttga aaaccacacc ctgtgctaat tgcaagtcta gtctactctg gtgctgctct gtggtattgc agacatagag tctgctctgt ggtacatatg 300 gaccaggtct tatgatgatg ataggccatg tttagtggct tcacacagag gtacttcaga 360 gcttttattt ggattcctcc cacttggata ctgttctgac tgctttatca aaattaagtg 420 tetttgettt caccetecte etaaaagtea tteaacetaa aagtaaaatt ttggggggca 480 ttgagggggg aagaagcaga aaatgttctg tttaacaatg agatctacac cagatatttc 540 attttgatta tttaaatata aaagatacct tttgctcaca gtagttggct taaagtactt 600

catgatttat gaggggtgat tgctgacaaa gtactgggag gagccgtttt gagtcaacac 660 gaccatttgc atctgccttc acttgctctc ctctcttatt aaattgagct atcctatggt 720 gtgggttttt atagtaatac tagaacactg tgagtcatac cagagcagtt gngccgnctt 780 cactacattc tcaccntgct g

<210> 335

<211> 821

<212> DNA

<213> Homo sapiens

#### <400> 335

taaacagagg cccacagcta gtttgcagaa ccactcaatt ttaagtgctg tttaaattgc agagcaaata atcctgtgtg ggaactgtgg ttacaggaaa tggagcactc taacaatgtt 120 180 cagcaaaagc aaaagtagca acatatgtca acatatgtca ctgaaatagg aaacagtcat 240 tggaatgttg cacagaggct aataactata gactgttgga tacagtggtg agaggagccc 300 cattttaggt ctttctttta ggtttttggt tttcattact ccaagtaatc cttgacccaa 360 gaacaaaggc ttgttgtatg agttccactg ccagatttat gggatgcctg gatcattcag 420 aaggatgett caactattat ttgtcaggte caaaggtegt acttgataac cecattttet 480 atgtatgggg tagtctaata tattatttta tctactttat ttttcccttt tcagaaagtc 540 cttagtgcaa accaccattg gaatctagcc agaaatgtct gtcagatagt tagaattgta 600 660 acatctaaac ctgccacgga tcgaatggta cttacaggta cctctcttag ggactctgtg atccctaaaa tatcagaaga aaatgtctgn ctttctgcca aatatctact tgacttgggg 720 gaagtcaaaa ataaaagtag gtgtccaagg attttacttt tggcgaaatc tgacgtctcc 780 tgagcttatt ttcattttgn ccttggacat acatanngct t 821

<210> 336

<211> 688

<212> DNA

## <213> Homo sapiens

# <400> 336

| g t tgg cc tuc | -00 -0 -0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | adatetedag | ggaaactta  | aggaatgget | acctacagtc | 60  |
|----------------|---|------------|------------|------------|------------|-----|
| caccttttaa     | ctgagaccca                              | cacggttgca | tgaccttcat | gagttggcca | tggctctttt | 120 |
| ccacgttcct     | ttcatcccag                              | gactccggct | gaaggacctg | ccattctctg | ggagactgct | 180 |
| atccttgtag     | cagaaggaaa                              | gggcgatggt | ggaatccata | atggcttcta | aagctgctgt | 240 |
| tttgaagtgo     | atgtttcact                              | tcctgctcgc | gtttcattag | tgaaaataag | tcacatggcc | 300 |
| aagcctgata     | gcagcggagt                              | gggggtgatt | aattctctca | cagggagggg | tagaaatcag | 360 |
| ttaggtgcaa     | gcaacaccct                              | ctaactgcga | gccattggag | gcttttgagt | gggtaatgac | 420 |
| ataatctagt     | ttgcatttgc                              | ggaagatece | atgcagaaac | aaatgtcaca | ctgcagctgc | 480 |
| aaggacagtg     | aggagggaga                              | tggccatggt | gccttggtcc | ccagagtgac | ggcatgcgga | 540 |
| ggcgtcaatg     | catctacctc                              | cagcacacca | ggcatgatgt | caggtgcagc | aggaggtacc | 600 |
| tggccctttg     | ctacacagac                              | cacatggtct | tgctggggac | aagacctang | gaacagntca | 660 |
| ttttggtaća     | gtgtggttgg                              | ntcctgga   |            |            |            | 688 |

<210> 337.

<211> 803

<212> DNA

<213> Homo sapiens

### <400> 337

| ttagattatg | acataaatct | tgtaaaaacc | tgtcagttat  | tttcatctat | gagagaagag | 60  |
|------------|------------|------------|-------------|------------|------------|-----|
| gagcccaaac | tctcgcccac | ctgttcttaa | ccagaaaaacc | cactgacttt | gaaaatctca | 120 |
| cctctgccac | ccatctactt | gcattcgtct | ttggcagacc  | tcaagataaa | tatgggttaa | 180 |
| tgcctgcatg | atgcctctga | attcaggaat | tgcagggaaa  | actcggggct | ttgtgccagt | 240 |
| ctctaagttg | gcaactttgg | ctgaacaaat | gagtagtggc  | ttcagtgtcc | ttgcgtacac | 300 |
| attctgtgga | ttgatttaat | ggagttgtca | gcatgatcat  | catcttctag | ccaggggcat | 360 |
| agttgccaag | gccatttacc | tctttctaag | aagaaacaga  | attatgtgta | tatatgagag | 420 |

aaagaaacaa gaatgcgtga atgaggatga agaaacattt accccatgta ctcaagacat 480 ttcagtttta aaagtcactt tcctattaga cttcttgaaa aagattctca catagcctct 540 atgtaatcag acaaatgaca tttgatttca agagcagagg ggtaaacatc ctctgctaat 600 cgacaggtag caggtgtcag aggaggcata atattaatag cgccaccttc tgttgggtca 660 gtggagatgg gtgaggagca gcacagagca gcagggatca tcacatgcag ncaaacttgg 720 cctctgaang gggaaggtag tgggaatang tggtgagaga actccatttt tctcttggcc 780 tgggtttata tttcggaggg aaa

<210> 338

<211> 790

<212> DNA

<213> Homo sapiens

#### <400> 338

aatttagtge tactgaacaa tteagtagtt atttetgaae tttgetgeaa agtgetettt 60 agttaaagca cattaagaag ggtcactgct taattgcttt gtaaaatgaa gcaatggtat 120 tttttatccg atatagtgta atttaaaagt tttcctacaa agtgagttta tattgttgcc 180 taaactatgt tatgtaagca aaggttttgg aaaggcggga gggagtctag attcggcgag 240 agtgtgcgtt tgtgtgtgtg aatgtatgaa aagtttcccc attgggttat tcttaagatg 300 tgtttattgt aaagttttct acgttttgcc cacagtaaat gtacaacttc gcaattgtag 360 gatttaattg attgaattcc aaatttatac tgtctcttcc cttctgcaga gacattatgc 420 cactgtaagg tgcatgtaca gaaaatacct ctgaggttga cttgttaaat aactgatgaa 480 tgttatttca cactgaatct caaagcagtc atttgttttg cgggttaggg gaaagttttg 540 ttttttgctg gtgttttttg ttgtttttaa ttaggcacac taagagtggc taaatttggg 600 ggaattggtg gataggaaag accttgaaaa gtgatgtgta gatgaaaaca caaggtatgg 660 720 atgttggtta cagagttcag tittaacaag ggaaatttgg ggattttttt tittttactt 780 gcatggtcta tgggtagcta tcaaanggtg tacaaattat tccagctttt cccaatctaa 790 nthatattgg

<210> 339

<211> 832

<212> DNA

<213> Homo sapiens

### <400> 339

| tggatcacca cctgg | stccag cttggccgaa | ttcataaacc | tgaccacagt | tatggtgtga | 60    |
|------------------|-------------------|------------|------------|------------|-------|
| agtttgtgaa gtcct | ttata aactcaatca  | ggcgtgcaat | caacaaatat | ccaccaataa | 120   |
| acttaaaaat aaagt | gcaac agacttaact  | ctatagatcc | aaagcagccc | ccacgaccat | 180   |
| tccgaagctt tgttc | ctgga ccacttaaag  | ctaccctcaa | agaagatgta | ttacagaagg | 240 . |
| caaaattctt tcaag | ataaa aaatatcttt  | caagagtagc | aagaagtggc | agagatgatg | 300   |
| ctattcaaaa tttta | itgaga agcacctccc | atacctttaa | gaatggaagg | atgatagaaa | 360   |
| gtgctcccaa acaac | atgat taaaaaaatg  | cttgaacaac | ttagccttag | gaagcatggt | 420   |
| aagactctgg actta | naatag taactaaatc | tgctgccaga | actcaagcaa | cagtttgtag | 480   |
| gttatcaggt gactt | gaccc cctgcattca  | ttggtattaa | gatatatctt | gttcatttat | 540   |
| ttgaccactc ctgac | caatte cageacteta | cgactgatat | gtcgaagaac | tgtttcatta | 600   |
| gaagacagaa gaatg | gaaaga agtgttttga | aaagtotaat | ggagatataa | tttgaaggta | 660   |
| aaatttatat gatgt | atgca tatgtgtaca  | tgggtcaatg | ttaattcttt | tatctctgtc | 720   |
| cagttcattt tctgc | caaacc catectnett | tcctaattaa | gtaatgncta | atgctcatct | 780   |
| atttagtcaa aggta | itttt taatgettta  | agctacttca | aaanttatcc | ta         | 832   |

<210> 340

<211> 871

<212> DNA

<213> Homo sapiens

<400> 340

tggaagaata agtatttigt aaaaattcac ttgataccac attttcattt ctggaacagg 60 atagcaatca ttcatttcta tcttgtgtct gtgtccacca caaccaagac cagatgcatc 120

tgatgaacat tetggaatte tgaactgeag etageetget gtgeaatagt acaagtggga ggacgtette ecagggetgg getggttete aactagtgee cagatgeaaa aggactgagg catcactttc agactgcata tatttttatt catataaagt tctttataat actttatttt 300 gtggtgttaa gttccaccag ttatttacaa atgatgtaaa aagctttaag tgttgttaat 360 ttctaaagtg ttcttgcgtt ttcagaagtg taagtggatc tcagttgatc tgtcacccca aacctcaaat gatccatcca ccctgcttgg ccatctaatt cacctgctct ccccagtgac 480 tattttggac ctttcctctc catagatgac tttgcaatct acagggaaaa tacttatgca 540 ggacatetta tateteece ttaccaegta cagttetete cacagetgee ageageeeta 600 acctttttgt ctctccacct gtgctttgga tgctcttctc ccagcctttt caggatcttt 660 gtotgtocto otatattaat gtattoaatt attototoag otagatoott gotacttggt 720 tttaaattta agactaagat taaacaaaac tatctttcac aaccacaaac ccccttccgn. 780 caagcaacta agaatttnct ctcattctca gccagttttc ttgcagcagt atctttagtc 840 attggcctca atcatctaat ccctatctta a 871

<210> 341

**<211> 871** 

<212> DNA

<213> Homo sapiens

#### <400> 341

aggettatea aagteaagea etgtgteace tggtaatgea aaccetteea geatetetge 60 ctttaggttt taggggggaa tcgtcaaaac agacatgcag cccactacaa agtacttgaa 120 agcaataggg caccattcaa gcacacgcct gcatttactg ggctacgttt atttagggca 180 240 ttcaggtggc tgtaattatt gtgcataaat agttttctaa aaagcataaa actaaaaact 300 tgatccatgg aaacacagtg tggtttagga tggagatcgg atttcactca cctcaaaata actectggtg tttgeeteea agaceeatta atttatgtta tetettgete tgtageagtt 360 tggatttgtc acacttagca aagtaatttg gtttcccaca ggttttgttc tgttttatag 420 aagcaagaga acggttttgt gtttcagagc atgaatacat tccttcagaa atttagccag 480 catttcagaa ggatatgaat ttttattttt agctatttac acctgcctga aaggttgatg 540

ctgctaaaca ttgatattac ttgaaaagtt gtgcccaagg catattgctt ctttcctagc 600 taggaattga aatgtttatg aagcttgctg aaaatttacc aggttaccaa aataagagtt 660 tatatctctt atgtagtgac taacagaaat agatttatgt attcaaccaa ccgtccaata 720 tttattaagc cactaatata tgcattgaat tatgctggat ttggggtgac atcagattat 780 tcaacataca cttctcctgg ttcagttcct tttaacatgg tattactggg cacttacaga 840 atggcaaaat cccnttaata agactcaggc c

<210> 342

⟨211⟩ 870

<212> DNA

<213> Homo sapiens

#### <400> 342

tgcctcaacc ataagcgaca ttgaaactgc tgcagacaag tgtgaggaga tggaggaagg ctàcatccag tgctcccagt ttctatatgg ggtgcaggaa aagctgggtg tgatgaacaa aggtgtggcg tatgctctgt gggactacga ggcccagaac agtgacgagc tgtccttcca. 180 cgaaggggac gccctcacca tcctgaggcg caaggacgaa agcgagactg agtggtggtg ggctcgcctt ggagaccggg agggctatgt gcccaaaaac ctgctggggc tgtatccacg 300 gatcaaaccc cgacagcgaa cactcgcctg aacttccttt tggagcaccg catggtcttg 360 ccagctacca ggagccactt aagagattat tgtgctgttt tccaggaaag ctgcagctag 420 aaaatggtet taatggtget eactttagea gaeagegtee acaatgtgaa teetaeagtt 480 tccaggtgag gccctttctc cagtttgccc attaactggg agaggtactt tcgcctccaa 540 600 cctcttgcca ttaagaagtc ccataaccc cggttggttg ccagtgaaga cagaagctct 660 tactgacttg geeegagge cateacece tteageagtg aacaetgtee geegetgtga 720 ngcctgctcc cctgcgaccg cctgcccccc gtcaccgaat cggacactca tcctttctac 780 actiticaca catgatecti etiticettia teaceaaagg ageetnigia tggnaacatg 840 tneatggttg ettgeceatg tgtatgeete 870

<210> 343 <211> 869

<212> DNA

<213≻ Homo sapiens

### <400> 343

| gaattcaaaa gatg | cctatg gttggttac | a cagcttttga | tttgcatagg | tattcgaacc | 60    |
|-----------------|------------------|--------------|------------|------------|-------|
| caggttttgc tgac | ttcaat gctttacct | t aaaagatgct | tttttagaat | ggtagatgtt | 120   |
| aatagatggt ctgt | gtaatt agtttcctg | g gcctcčtgca | acaacataga | aaaaaatggg | 180   |
| taacgtaaca ttta | ttctct cacaattcc | a gaggccagaa | gtccaaaatc | aaggtgtcag | 240   |
| cagggcgatg ctct | ctgaag gctctagag | g agaatccttc | cttacctctt | ccaaacttgt | 300   |
| ggcagttctc agca | gtcctt ggtgttctt | g gcttgtagat | gcatcactcc | aatatctgcc | 360   |
| tccatcaccc ccca | gctgtc tttcctcat | a tgtttttgca | tcatcttacc | tctgcgtctg | 420   |
| tgttcaagtt ttct | tctgct tatgaggac | a tcggttatat | ttgtttagga | gcctacccta | 480   |
| ttccagtgtg atct | catctt agttacatc | t accatgacct | tatttccaaa | taaggttaca | 540   |
| ttttcagaca tggt | agttaa gactttaac | g tatattttg  | gggttgagag | gacacaattc | 600   |
| agttggtaac agct | atgaca aaattgggt | a aattgatgaa | catcttaaaa | aaaacacagt | 660   |
| ggaagaggca ggca | ctgtag agtgacaaa | a tacatettta | tagaaattcc | atgttaaaat | 720   |
| tattttgngg tata | ataatc aaatttaaa | t acctaataca | tatattacca | ttaaacagga | 780   |
| tagtcagcac tacc | tagttt tttaactga | a tttgtaatgg | ccatatggtt | atggttcttt | . 840 |
| agtaatactt gaac | taaang gaattgcaa | •            |            |            | 869   |

<210> 344

<211> 861

<212> DNA

<213> Homo sapiens

<400> 344

tttaaaacaa aaattteetg egtgaaatte tggettagtt aactttttgg tetttetee 60

| ggggcttttc | ttgttcttat | aaaatactgt | aaattacaaa | tggaaattta | atgcagaatt | 120 |
|------------|------------|------------|------------|------------|------------|-----|
| aaatttctag | tgtacaatat | ttgtaagaca | agaagaaaat | ttccttttcc | cagateteag | 180 |
| gaactacctt | gttcctgtta | acttcttgaa | ctggctagtt | gctcaaaggt | atgtatacag | 240 |
| gcctttaggg | aagagcagtt | tttaaaattt | tcctttctga | tcattatata | cctgtcagat | 300 |
| gacaatagat | aatcttccaa | agttgctacc | taaaaatcct | aggaaagaaa | ctttggtgaa | 360 |
| catgactgcc | attcccatta | attgctaatg | aaaaacatca | gacttgctta | gtagaaaaac | 420 |
| acctaatttg | gtataacttt | cttgcagttt | atccatatta | tgtgcttgtt | acttaatgta | 480 |
| attaaaagca | ttttaaaatt | ctacttttt  | cgtatccact | ttttatactt | gctacttcct | 540 |
| aaatcctccc | tcactgttta | tttcatccat | ctactcattt | cccatcatcc | aaagttagcc | 600 |
| tctccttgta | taccaggcac | tgtctgattt | ccatgtattc | cttttatttt | tactgtgggc | 660 |
| ctttgtgctt | agtatacttt | tacttcatat | aatgtgatta | acaaatgaag | tgattatcat | 720 |
| atggagttta | aggaaattag | atgtatcttg | caattacttt | gaaatctttg | ggaaacctta | 780 |
| agaagatgga | tctgtttcat | tttattacca | catcttggaa | ttgntcatga | ttcctaaaat | 840 |
| ttcttgccta | cccacatntt | g          |            |            |            | 861 |

<210> 345

<211> 869

<212> DNA

<213> Homo sapiens

# <400> 345

| gaaacatatg | aagctctatt | agccagattt | cccaatcttc | gatttgcata | caaggatcca | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| gagaagaact | ggaatagaaa | ttgtgtgaaa | ggacttgtgg | cttctctgat | tagtgtgaaa | 120 |
| gacacttctg | caaccacagc | tttagaatta | gtggctggag | aacgactcta | caatgttgta | 180 |
| gtagacacag | aagttactgg | taaaaagcta | ctagaaaggg | gggaactgaa | acgtcgatac | 240 |
| actataattc | cactcaataa | aatttcagcc | agatgtattg | caccagaaac | tctgagagtt | 300 |
| gctcagaatc | ttgttggccc | tgacaacgtt | catgtggctc | tttccttggt | tgaatataaa | 360 |
| ccagaacttc | agaaagcaat | ggagtttgtc | tttggaacaa | catttgtttg | tgacaatatg | 420 |
| gataatgcca | aaaaagtggc | ctttgataag | aggataatga | ctagaactgt | aactctcgga | 480 |

ggtgatgtgt ttgatcctca tgggacattg agtggaggtg ctcgatccca ggcagcttcc 540 attttaacca agtttcaaga actcaaagat gttcaggatg aactgagaat caaagagaat 600 gagctgcggg ctctagaaga ggaattagca ggtcttaaaa acactgctga aaagtatcgc 660 caactaaaac agcagtggga gatgaaaact gaagaggcag atttattaca aaccaagctc 720 cagcaaagct catatcacaa gcacaagaag aattagatgc ccttaaaaaa accattgagg 780 aaagtganga gactttgaaa aacactaaag aaatccaaga aaagcngaag aaaaatatga 840 agtattggaa aataaatgaa aatgcngat

<210> 346

**<211> 813** 

<212> DNA

<213> Homo sapiens

#### <400> 346

atttagaatt taagcctaga tacttcagca gtttttctat aactgaacaa agaaacaaag tagetettga tggtecagta aaatgagtet aaccagggae teettacagg ttttatatat agtaaactac attttcgtgg aatatgagaa ttacgttaaa agagtaccaa ctaagaataa ttttattgtt catggaagat agggtaaatc tcaatactgc cttatttata catgtactaa 240 300 tcaaaagagc cattaaactg tttttccaca ctattatact aagcacattt cacagcttta catgicatet gggcccagig tggtgactca taccigtaat cccagcacti tgggaggcca 360 aggcaggagg atcactgagc aacattagga gacctcatct ctacaaaaaa cttaaaaatt 420 ggtcgggtgt ggtgatgggt gcctgtagtc ccagctactt gggaggctga ggcaagagga 480 540 600 agtaaattot attitiggata agtagtaaag aatgggtitt gggggggtgta tittittaaa 660 720 tcttgtaggg gacaagtaat ctattccagc aggtagatct aatctttctt ttcattctaa gnttatactc taaagnttta ttttgncaga ctttttacag ggtaccttta gtggttgcca 780 atctggcatg tctgacaact gggttataaa ctg 813 <210> 347

<211> 817

<212> DNA.

<213> Homo sapiens

<400> 347

| acgtggacgc  | gtctgggctg | ctggaggcag | cccgagccgc | cgccgtcggt | gtcgccgcca | 60    |
|-------------|------------|------------|------------|------------|------------|-------|
| ccaccaccat. | cggagtcacg | agtcccgcgt | ctgtccgaag | tcgccgctct | cgggctgctc | 120   |
| acgtctcttc  | ggagggcgcg | cacatggcga | ctcaggcgca | ctccctcagc | tgctcgtgag | 180   |
| gaaaccctct  | atcctcacaa | tacacccact | gctacatgtt | ctcatagacg | cctctccccg | . 240 |
| tccttatcgt  | agtactcact | gcaccctgtc | gttgcttaat | tttcctctct | cttcacctat | 300   |
| ggtggtaggg  | gccatctttt | aagatctggt | gtgtccatga | tcttaaagtt | tttaagtttc | 360   |
| tattaaaaat  | caattatatt | atttgtgaga | gaagttttt  | ttttttcttt | ttgaaatacg | 420   |
| taaaataaag  | ctggctggct | tcttgaattt | tagtagtgca | ttgtggaaat | aacacaggct | 480   |
| taggaattag  | ctatgtttga | atcccagctg | tgttagtagc | attgtgctgg | ccctctgtcc | 540   |
| ttctgaccct  | tagtttgctc | atctgaaaat | gggaattacc | ttgtgcccac | cctgggattg | 600   |
| agaagattta  | ttaaacttgt | gtttgtgctt | aggattcttt | ttagttgttt | gatccttggt | 660   |
| aaagattcaa  | agcagatttc | tgcataacag | gttaatgtca | gaatgagttc | accgtgttnc | 720   |
| aacgtggagt  | gccaggatcc | atctagtcgg | cacagaggan | aaagcctggc | tgactggcag | 780   |
| gtcctgaanc  | cctgtgtaca | ccaaaccaaa | ctgagtc    |            |            | 817   |

<210> 348

**<211> 784** 

<212> DNA

<213> Homo sapiens

<400> 348

cagagttgcc cagggaaagc agctatgaca tctacagagt gcccagcagt cagagcatgg 60 aggatcgtgg gtacagcccc gacacgcgtg tggtccgctt cctcaagggc aagagcatcg 120

ggctgcggct ggcaggggc aatgacgtgg gcatcttcgt gtccggggtg caggcgggca gcccggccga cgggcagggc atccaggagg gagatcagat tctgcaggtg aatgacgtgc cattecagaa cetgacaegg gaggaggeag tgeagtteet getggggetg ceaeeaggeg 300 aggagatgga gctggtgacg cagcggaagc aggacatttt ctggaaaatg gtgcagtccc 360 gcgtgggtga ctccttctac atccgcactc actttgagct ggagcccagt ccgccgtctg 420 gcctgggctt cacccgtggc gacgtcttcc acgtgctgga cacgctgcac cccggccccg 480 ggcagagcca cgcacgagga ggccactggc tggcggtgcg catgggtcgt gacctgcggg 540 agcaagageg gggcatcatt cccaaccaga gcaggegga gcagctggcc agcctggaag 600 ctgccagagg gccgtgggag tcgggcccgg ctccttcgcg ggcttcaatg ctcgggccga 660 gttctggcgg ctgcggggtc ttgcgtcgag gagccaagaa gaaccacttc aaccggancc 720 gtgaggacct tttaantttt gaacccgaca ggggcccgtt acccgncctt acgaaaccaa 780 atgg 784

<210> 349

**<211> 712** 

<212> DNA

<213> Homo sapiens

#### **<400> 349**

tatttataat atgtggagga gagaggctc accatgctca ggtaaaggga tgaagcctct ggtatgtcag aaccatgctg tettecatga gaetteettt gtgaagagca tecatttaaa 120 agacttttat gaatacatgg tttcaatcaa gtccccagag aacacatttg tcttctgagc 180 tgctggcagt tttgagaatc tgatgacctc cgaggggacc ctgcactcag ccatcaaagt 240 gttcctgccc ctctggacac tcataattca atggtagatg caggtggagt tgagaacatc 300 acceagette eccaggaget tecteagatg atggetgeag eageegatgg titggggagt 360 atagogatag acacgaccca gotoaacatg toogtgacag atoccacago otgggotaca 420 480 gccatgaata acctgggcat ggttcccgta gggttgcctg gacagcagct cgtgtctgac tcaatctgtg tcccaggctt tgatccaagc ctcaacatga tgactggaat caccccatt 540 600 aacccaatga taccaggeet tggaetggta ceteeceae caccaacaga agtggetgtt

| gtcaaagaaa | taatccactg | caaaagctgt | actctttttc | ctcaaaatcc | aaatcttcac | 660 |
|------------|------------|------------|------------|------------|------------|-----|
| ctnctttcac | aagagaacga | cctnctgggt | gtaagaccgt | gttgtcggan | ga         | 712 |
|            | 1.0        |            | •          |            |            | •   |

<210> 350

<211> 844

<212> DNA

<213> Homo sapiens

#### <400> 350

tgttataatg caaagcctat caaacttaaa attagcttaa tcctgaaaga tgtatattgc ataatcaacc tgtcactttt ttcaaacacg atttgggagg gtattgaggt cccatgtaaa 120 ttttaaaata aaagacaaac aggaactaat cttttagtaa aaattatttt gttttcatat 180 aggaaaacaa tgccttctgt catttacgga aaacacatgg gcaatatggt tggttgttca 240 ttgtgcccct ctatcctata ggaagaatgt gatcttttaa ttgtgcttgg tgctttgttt 300 360 gtatgtgtgt atgtgtgtat atatatetet etaggttgta tgtaatteaa tatgttggaa 420 tttaaagatg cattattatt tggatttgat gtgaaattag attgtgaata atggagattg 480 ctctccattt tttgctgttc tagcatagcc aaaaatataa agatatagat gtacatatac 540 atatgtattt gattaaacac tttaaatttt aaatggccgc atcaaatttt aaatggtaga 600 tgatatcaac aattgcagtg cactcaaaat gttataaaat ctttgtagca caaatcctga 660 agtatatgca aactaaatag catatttata taaaatacct agataacatg tetaggttga 720 gatatttaat ccctcataga gctatatttg actaataaaa aacgacagct aaaaataatt 780 tecetteeta taagtneaaa tatgatttta aageateatt gnaacttgne atgaactatt aata 844

<210> 351 ⋅

<211> 672

<212> DNA

<213> Homo sapiens

#### <400> 351

cttcctgatg gctcctggat gtcaggaagc accacgccat ttccagcttc tcaggctcat ggcttaaaag gaccccagcc aactgttctt cccaagcaag cagacgggat ttatggtggc 120 180 ggtttcttca aagtgcttct tctctaccca aatccagaag cgaaacaaaa cagaacactc 240 ctttaccttt tcgaagccag gaaaaggaac tcctcttatt ttttaaaagg cccaagagct 300 gcaagcaaat gtcaacttca tcctgtggtt tgatttacat gtttctttgg gagaaagaga caaaatacag cattgaactt aaaaaaaaaa acttacaatg aactgttata actcagaaca 360 420 tgatgcacaa acccagattt aacaaacgga gcaaaaaaaaa aaaaagttct tctgagaggc 480 tectegtgtg aggetgtgee tgtetggega ateatettgg aaatggatga ggttaaacca agggtcattg agtcccagca ctgggattgt tnntncctgc tctgaaaaaa tggaaaagct 540 600 acgtccataa gaggcatgga tgtctctaga acctgggcca aatatacaac cgcttttttc gagtgcgatt ttccctaatt gnaatattgt gcatgatcat gaatggaaaa ttttgggaaa 660 672 tgganaaaag tn

<210> 352

<211> 865 ⋅

<212> DNA

<213> Homo sapiens

#### <400> 352

gtcgtggctc gttccattct cggcggtggt acctgctcc ggtggccctg aggacgtgt 60 ggccaggggc ggccccgaaa ttaggaagcg gagggggagc agtctgcagg tctgcgggc 120 taagtgtcgc ggcggcgcac ctcgcgtcaa gaatccggag gaggagactg caaggatagg 180 cccaggagta atggagtcca aagaggaact agcggcaaac aatctcaacg gggaaaatgc 240 ccaacaagaa aacgaaggag gggagcaggc ccccacgcag aatgaagaag aatcccgcca 300 tttgggaggg ggtgaaggcc agaagcctgg aggaaatatc aggcggggc gagttaggcg 360 acttgtccct aattttcgat gggccatacc taataggcat attgagcaca atgaagcaga 420 agatgatgta gaaaggtttg tagggcagat gatggaaatc aagagaaaga ctagggaaca 480

gcagatgagg cactatatgc gcttccaaac tcctgaacct gacaaccatt atgacttttg 540 cctcatacct tgaatcctaa aagttttcgc tgaggttaat gtgaacactg ctttacaagc 600 ttgtattttt gtgatttact ttttctgtaa gccttttggt gtttacactt accagtttct 660 aatggaaatt agaattctaa ttgaatattg ttttgtctca gcctaaaagt tacngtcagc 720 attgcaattc acctatttta ggaaaaatac tcttttcata atatgaaatg cataagcatt 780 caaaaagcat ctgtattcca tcatttccnt tttcattcca gccttntttt tgaagtttac 840 tttcctctnc ggttcctgat taaaa

<210> 353

<211> 822

<212> DNA

<213> Homo sapiens

#### **<400> 353**

aatctatgcc agctctctgg catctggggt tcctgactga taccagcagt tgaaggaaga 60 gagtgcatgg cacctggtgt gtaacgacac aatcagcaca actggagaga ggcattaaag .120 aaccagggaa ggtagtttga tttttcattg aattctacaa gctaatattg ttccacgtat 180 gtagtettag accaataget gtaactatea getgeaatae catggtgace agetgttaca 240 300 aaagattttt teetgtttta tetgaaacat aetggattta tatatgtata agegeeteaa tggggaatta gagccagatg ttatgatttg tttgctcttt ttcttttata gttatagcaa 360 420 aaatatggat aatttctagt gaatgcataa attaggttgc gtttcttatt ttgctttaaa 480 tetetggtag ttttteeace eetgtgaeae aateetaata gacagtgtee tgtaaatgga cacaacacaa taaagtcaag ttattattgc tgttactctg gatgatatgg aaaacactgc 540 catattttaa atcaactact ccacgtgttt ttccatccaa tcacactgct gtgattcagg 600 gatetttett etaaaaegga eacatttgaa eeteangtte ateacaaaee tggtaeetgt 660 tgcttnccag aggatgggag aagtgtagtt aatcacacct cttagtttaa tctgaaatct tgacccagtt atttaacaaa taaatacctc attgattata tttaaaaagta atcccttcct 780 gnnaaccaaa tggggacaat gcattccaaa aaanttttta aa 822 <210> 354 <211> 769 <212> DNA

<213> Homo sapiens

#### <400> 354

aaaaccgcgg ttgccggagc ccgaactgag gcggcggcgg gagcccggtt ggcgtctggt 120 cttcgcgtcg gccccgcgga gccagacgct gcccccggcg cggggagaag atggtgccta gcggcctcgg gcccgccacg cgccgccacg agtgagccca gcgcgaccgc gggcgtccgc 180 240 cgagcagctg gcccggctgg gcccggggcg cgcagctgcc cgccggggcg gggtggagct 300 gatcagaata atgttcagca tcaaccccct ggagaacctg aaggtgtaca tcagcagtcg 360 gcctccctg gtggtcttca tgatcagcgt aagcgccatg gccatagctt tcctgaccct gggctactic ticaaaatca aggagattaa atccccagaa atggcagagg attggaatac 420 ttttctgcta cggttcaatg atttggactt gtgtgtatca gagaatgaaa ccctcaagca 480 teteacaaac gacaccacaa eteeggaaag tacaatgace agegggeagg eeegagette 540 cacccagtcc ccccaggccc tggaggactc gggcccggtg aatatetcag teteaateac 600 cctaaccetg gacccaetga aaccettegg agggtattee egcaacgtea eccatettgt 660 720 acttaaccat cttaagggca tcaagattgg acttttcaag gcaaggggaa agccccaccg 769 aagggaggat ttaaaccatt taaccnttta accccttggc cntancaag

<210> 355

(211) 714

<212> DNA

<213> Homo sapiens

<400> 355

tcccttctcg tcgtcgccat tttgagctgg tgactgtggc cggctgggag taggcggcag 60 tgagtttccc tgggagggca gcgcgcttgg cgcttctccc ctccccccga tctgcctcca 120 gtctcggact tggttgttgc gcgctccggc tccggctgag ctgggaggag tggaggaggt 180

ggcggcggcc agaggtgatg tctgggagcc cttccttgac agcccgggcc gagaagagtc cctgcgggaa gcatcaccca ggctggcaga tcatggtagc agcagcgggg gtggctggga agtgaaacgg agccagcggc tgaggagggg ccccagcagc ccccgaaggc cctatcagga 360 catggagtat gaaagacgtg gtggttgtgg tgacaggact ggccgctatg gagccactga 420 ccgctcgcag gatgatggtg gggagaaccg cagccgagac cacgactacc gggacatgga 480 ctaccgttca tatcctcgcg agtatggcag ccaggagggc aagcatgact atgacgactc 540 600 atctgaggag cagagtgcgg aggattccta cgaggcctcc ccgggctccg agactcaacg tangcggcgg cggcggcaca ggcttccccg agacggcgac tatcgggacc aggactatcg 660 714 gaccgagcaa ggggaggagg angaggagga ggaggatnaa ggaggagang agaa

⟨210⟩ 356

<211> 722

<212> DNA '

<213> Homo sapiens

#### **<400> 356**

gcaaaaagcg aggcgacggc ttaaagatgg agaacgaccc ccaggaggcg gagtctgaaa tggccctgga tgctgagttc ctggacgtgt acaagaactg caacggggtg gtcatgatgt 120 tegacattae caageagtgg acctteaatt acatteteeg ggagetteea aaagtgeeea 180 cccacgtgcc agtgtgcgtg ctgggaaact accgggacat gggcgagcac cgagtcatcc 240 tgccggacga cgtgcgtgac ttcatcgaca acctggacag acctccaggt tcctcctact 300 tecgetatge tgagtettee atgaagaaca getteggeet aaagtaeett cataagttet 360 tcaatatccc atttttgcag cttcagaggg agacgctgtt gcggcagctg gagacgaacc agctggacat ggacgccacg ctggaggagc tgtcggtgca gcaggagacg gaggaccaga 480 actacggcat cttcctggag atgatggagg ctcgcagccg tggccatgcg tccccactgg 540 cggccaacgg gcagagccca tccccgggct cccagtcacc agtggtgcct gcaggcgctg 600 tgtccacggg gagcttcagc cccggcacac cccagcccgc ccacagctgn ccctnaatgc 660 720 cggcccacca tnctctggcc ccctgtacca cccttagagc cctgccccaa ctgcgtgccc 722 ct

<210> 357 <211> 671

<212> DNA

<213> Homo sapiens

<400> 357

| cacgagittg agigceteta tgetgeette etagatitee aateaceaea ggigcatett 180 cattetatea gigcaccea etactetee ticacactee agicaaatet tagetgittg 240 titigitgeet tgateettit titigitgitg ggitagacaa geaecaggia teeetactea 300 geeatetige tgatgitaet eetitatige titiettite titiettite titititit 360 titigagatga agicgegeee tgitgeeeag geiggagige aatggigga teeeagatea 420 etgeaacete eaceteetig giteaagega eeaagiagee teageeteee aagiagetga 480 gaetacagge acceaceace acacceaact aattitigia tititigitag agaeggage 540 teaceatgit ggeeaggeig gittigaact eetgacetea agigateege eigeetnage 600 etnecaaagi geigggatta taggeiggag ceaetgigee caacinetti attgettita 660 | ggccttcatg | tgtttgtggt | ggcaaagagg | ctggtaggga | tcttctgctg | actttttcc  | 60  |
|--|------------|------------|------------|------------|------------|------------|-----|
| cattetatea gigeacecea etaetettee ticacaetee agicaaatet tagetgittg 240 titigitgeet tigateetitt titigitgig gigitagacaa geaceaggia teeetaetea 300 geeatetige tigatgitaet eetitatige titietitte titietitte tititittit 360 titigagatig agicaeece tigitgeeea geitgagige aatigitgia teeeagatea 420 etgeaacete eaceteetig giteaagega eeaagtagee teageeteee aagiagetig 480 gaetacagge acceaceae acaeceaact aatititigia tititigiag agaeggage 540 teaceatgit gieeaggetig gittigaact eetgacetea agigateege etgeetiage 600 etneeaaagt geitgigatta taggetigag eeactgigee eaactnetti attgettita 660   | ctgcaatagc | aattccctcc | cgtctccagg | cagatetgat | ctaggtgggg | aagatgggac | 120 |
| tttgttgct tgatctttt tttgtgtg ggttagacaa gcaccaggta tccctactca 300 gccatcttgc tgatgttact cctttattgc ttttcttttc  | cacgagtttg | agtgcctcta | tgctgccttc | ctagatttcc | aatcaccaca | ggtgcatctt | 180 |
| gccatcttgc tgatgttact cctttattgc ttttcttttc  | cattctatca | gtgcacccca | ctactcttcc | ttcacactcc | agtcaaatct | tagctgtttg | 240 |
| tttgagatgg agtcgcccc tgttgcccag gctggagtgc aatggtgtga tctcagatca 420 ctgcaacctc cacctccttg gttcaagcga ccaagtagcc tcagcctccc aagtagctgg 480 gactacaggc acceaccacc acacccaact aatttttgta tttttggtag agacgggagc 540 tcaccatgtt ggccaggctg gttttgaact cctgacctca agtgatccgc ctgcctnagc 600 ctnccaaagt gctgggatta taggctggag ccactgtgcc caactncttt attgctttta 660   | tttgttgcct | tgatcctttt | tttgtgtgtg | ggttagacaa | gcaccaggta | tccctactca | 300 |
| ctgcaacctc cacctcettg gttcaagcga ccaagtagcc tcagcctccc aagtagctgg 480 gactacaggc acccaccacc acacccaact aatttttgta tttttggtag agacgggagc 540 tcaccatgtt ggccaggctg gttttgaact cctgacctca agtgatccgc ctgcctnagc 600 ctnccaaagt gctgggatta taggctggag ccactgtgcc caactncttt attgctttta 660  | gccatcttgc | tgatgttact | cctttattgc | ttttcttttc | ttttcttttc | ttttttttt  | 360 |
| gactacagge acceaecace acacecaact aatttttgta tttttggtag agacgggage 540 teaceatgtt ggeeaggetg gttttgaact eetgacetea agtgateege etgeetnage 600 etnecaaagt getgggatta taggetggag ceaetgtgee caactnettt attgetttta 660  | tttgagatgg | agtcgcgccc | tgttgcccag | gctggagtgc | aatggtgtga | tctcagatca | 420 |
| tcaccatgtt ggccaggctg gttttgaact cctgacctca agtgatccgc ctgcctnagc 600 ctnccaaagt gctgggatta taggctggag ccactgtgcc caactncttt attgctttta 660  | ctgcaacctc | cacctccttg | gttcaagcga | ccaagtagcc | tcagcctccc | aagtagctgg | 480 |
| ctnccaaagt getgggatta taggetggag ceaetgtgee caactnettt attgetttta 660  | gactacaggc | acccaccacc | acacccaact | aatttttgta | tttttggtag | agacgggagc | 540 |
|  | tcaccatgtt | ggccaggctg | gttttgaact | cctgacctca | agtgatccgc | ctgcctnagc | 600 |
| atctctgcat a 671   | ctnccaaagt | gctgggatta | taggctggag | ccactgtgcc | caactncttt | attgctttta | 660 |
|  | atctctgcat | a          |            |            |            |            | 671 |

<210> 358

<211> 796

<212> DNA

<213> Homo sapiens

**<400> 358** 

gtttccatcc ctcctctgga ggcttttgaa gtcaccggga gacagatgtg ctctgtggca 60 ggcaggggag tgggggtgct caggcacttg ggaggtctgg gagctcctca gtgtgaccgc 120 tgggacccac caggactttt tcctttgtca gaagcctttg gttgctttgc tgctctgcat 180

gtgtcactgt ggaggggcaa tagagcaagg ccttacatgg catggtcatt tctcgggccc 240 aggaggetta gaggeetgee eetggegete aagtattgaa eeagaaceat ggggtggeae 300 tgaagcctcc tcaccacatc atgataaata acggggacat tcacagagca ggcactgttt 360 cctcagtcca tggctgagta catcaccggt gttttctctc ttattcctcc catcaagcct 420 aaaaggaatc tctattggag atactgccat tagtgttcct tttataggtg aggaactgag 480 gcatagaggg ttccccagtt gaaccaactg ataaatagta gaacttggat tttaattcag 540 600 tettgatgee agggataagg etettaettt etacettagg etatttetag gaaacgeang agagtgttga aggggcagag aaagggatcc agttcctttc tgtcccgcat cctagtccct 660 720 tcaggggacc tgggctcttg atcttggcct cttncccttt aactggtaaa tgggaacagg 780 796 tnaaggggta cnagta

<210> 359

<211> 797

<212> DNA

<213> Homo sapiens

#### <400> 359

acagtgaate agtgaccece aacceaeggt eccetetaga agactattee etceatatea 60 ttgaccttca caccggccgc ttatgtgata cacgcacgtt caagtgtgac aaggtggtct 120 tgtcacacaa ccaagggctg tacttgtaca aaaacatcct ggccatcttg tctgtgcaac 180 aacagaccat ccatgtette caggtgacte etgaaggeae ttteattgat gtgeggacca 240 300 ttggccgctt ttgctatgag gatgacctgc tcactgtgtc agctgttttc cctgaggtac 360 agegggacag teagacagge atggecaate cetttaggga teettteate aatteeetea 420 aacaccggtt gctggtatat ttgtggcgcc gggcagaaca ggatggtagt gcaatggcca 480 agaggcgctt cttccagtat tttgaccaac tgcggcagct gcgaatgtgg aaaatgcagc ttctggatga aaaccacctg tttatcaagt acactagtga ggatgtagta acactgcgag 540 600 tcacagatcc atcacaggca tctttctttg tggtgtacaa tatggtgacg acagaggtga 660 ttgctgtgtt tgagaataca tcagatgagc ttttggagct ctttgagaac ttctgtgacc

| tttttcgtaa | tgctaccctg | cacaagtgaa  | agttcaattt | ccctgctcag | cttctagcaa | 720 |
|------------|------------|-------------|------------|------------|------------|-----|
| caattttgca | aggcagatcc | agegeengnt. | caaagaccta | ttataaatgc | caagttggag | 780 |
| ggcacacaga | gcantac    |             |            |            |            | 797 |

<210> 360

<211> 850

<212> DNA

<213≻ Homo sapiens

<400> 360

| aatacaagtg | gatttgttaa                              | atggcttttc | cctagatgaa | gtaggtcaaa | ctcgggcctg | 60  |
|------------|---|------------|------------|------------|------------|-----|
| catctcccta | aggaggcaat                              | aatgcctggt | agcattacca | gagggtaaga | cggagaagta | 120 |
| ctttggagaa | attagaaact                              | tccctagtac | ttgttatgaa | agctcaaact | ctttaaaata | 180 |
| atggaaatgt | cataaatcag                              | gcagattcac | ttttgcctga | ggatggcttg | aaggaggctg | 240 |
| ctgtgagctc | tttagtgatt                              | tgtctgacac | aggctacagg | caaatttaaa | ggtgaccaac | 300 |
| ttagcaagaa | acaaggcaat                              | tgaaagatcg | gtttcctacc | ttgaccagct | aatgcctgca | 360 |
| agagcagacc | gaatggctga                              | attccaaccc | gattccagga | atactgtttg | ctgacctgct | 420 |
| gtcttaagtc | agtgctgtga                              | ttcctgcaaa | agacggcaga | gtcagggtgg | ggaaatgagc | 480 |
| aggtgctgct | gttggcggtg                              | ggtctaaaca | cccaccaca  | catttgtttg | catcacttgt | 540 |
| ccaggactat | gattctggca                              | ctattttcct | ggatgttata | caatgtcaaa | ggggaaggtg | 600 |
| gatggttccc | accaagacag                              | aagcaccttc | ttatttcaga | tgctatcttc | ttggtctgct | 660 |
| gtgctgtgta | acaaaaatgt                              | atcaacccca | agcagagtta | aaggccagag | ctgggatgct | 720 |
| gtggtangct | gaaaaacacc                              | ctggaaaaga | tatncatggc | ctaatcctgg | accattgaat | 780 |
| ggttccttat | ntggaaaaaa                              | tgtggggagc | ctttgctaat | gggattaaat | taaggatcct | 840 |
| gaatcntgac | • |            |            |            |            | 850 |

<210> 361

<211> 770

<212> DNA

### <213> Homo sapiens

### <400> 361<sup>-</sup>

| 60  | cactctggtc | atgttgggac | ggcttctgga | tctcctactg | cagtgagaac | tcataatgaa |
|-----|------------|------------|------------|------------|------------|------------|
| 120 | tcttcctatt | tcttgaatat | gagagtagct | gtctggaaat | gtcgtttcct | caatgctact |
| 180 | gagggttttg | agaaccacct | ccattccatc | tctattcaca | cttcttttaa | cctactttgg |
| 240 | agtagctttc | aaagcccatt | ctcttgcttt | ctgtcacgac | agctccgatc | tccaaaacac |
| 300 | tgcattgtct | tacatggtcc | tgatacagcc | caaaactccc | gtgatagaaa | tgntgctctt |
| 360 | tagaggetea | gcctctgcac | acactccttg | atttcttacc | tccctttttc | ggctcccact |
| 420 | ctttgcactg | tgccagaggc | tgtttgtttc | gaactgacca | gcaggcttga | ctggctgatt |
| 480 | gtcatccttt | ttaactccta | ccctatttag | gtgcttcctt | ttcctggaat | ctgttttctt |
| 540 | ggcacgatct | ggagagcagt | cacccaggct | cttgatctgt | ttgagacggt | aatttattat |
| 600 | tcagcctncc | tcctcccacc | caactgatca | ttcctgggct | cagcctcggc | tgcctcactg |
| 660 | attttgtaaa | agctcaatga | gtgcccggcc | atgagccacc | gattacaggc | aaagtgctga |
| 720 | gtggtgattc | ctggccaggt | taaaaaagta | accactcaát | tcatgtagct | gcaatcatgg |
| 770 |            | acacttgagg | aggcnngagg | ttgggaactt | tccaagcact | acatttgnaa |
|     |            |            |            |            |            |            |

<210> 362

<211> 654

<212> DNA

<213> Homo sapiens

## <400> 362

| gcaacctcca | cctcccgggc | tcaagcaatt | ctcatgcccc | agcctcctga | gtagctggga | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ttacaggcgc | ccaccaccac | gcctggctaa | tttttttgt  | tttgtattgt | ttttttttt  | 120 |
| ttttagtaga | gatgagattt | caccatgttg | gccaggctgg | tcttcaactt | ctgatcttag | 180 |
| ctgatccacc | tgcctcagcc | tcccaaagtg | ctgggattat | acgcctgagc | caccgcaccc | 240 |
| agcctcaaat | cataaacttt | tttttgtttt | ttgagacgaa | gtctcactct | gttgcccagg | 300 |
| ctggagtgaa | gtgacacaat | cttggctcac | tgcaagctcc | gcctcccagg | ttcaagcgat | 360 |

tctcctgcct cagcctcccc agtagctgg attacaggtg tgcgccactg cgcctggcta 420 attttttgta tttccagtag agatggggtt tcaccatgtt ggccaggctg gtcttgaatt 480 cctgacctca ggtcatccac ccacctcggc ctcccaaagt gctgggatta cagacatgag 540 ccactgtgct cagcctcaaa tcataaactt tttaaaggnt tatccctgac cctctaaatt 600 aggttatgtg ccttgntata tgctctttta gcacttatcc taattgngat tggg 654

<210> 363

<211> 743

<212> DNA

<213> Homo sapiens

<400> 363

| ggaacggggc | agtcccctga | ggagcggggc | tggttgaaac | gctaggggcg | ggatctggcg | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| gagtggaaga | accgcggcag | gggccaagcc | tcctcaacta | tgacctcaac | cggccaggat | 120 |
| tccaccacaa | ccaggcagcg | aagaagtagg | cagaaccccc | agtcgccccc | tcaggactcc | 180 |
| agtgtcactt | cgaagcgaaa | tattaaaaag | ggagccgttc | cccgctctat | ccccaatcta | 240 |
| gcggaggtaa | agaagaaagg | caaaatgaag | aagctcggcc | aagcaatgga | agaagaccta | 300 |
| atcgtgggac | tgcaagggat | ggatctgaac | cttgaggctg | aagcactggc | tggcactggc | 360 |
| ttggtgttgg | atgagcagtt | aaatgaattc | cattgcctct | gggatgacag | cttcccggaa | 420 |
| ggccctgagc | ggctccatgc | catcaaggag | caactgatcc | aggagggcct | cctagatcgc | 480 |
| tgcgtgtcct | ttcaggcccg | gtttgctgaa | aaggaagagc | tgatgttggt | tcacagccta | 540 |
| gaatatattg | atctgatgga | aacaacccag | tacatgaatg | agggagaact | ccgtgtccta | 600 |
| gcagacacct | acgactcagt | ttatctgcat | ccgaactcat | actcctgtgc | ctgcctggcc | 660 |
| tcagctctgn | cctcagctgg | tggatgccgn | cctgggggct | gagatccgga | atggcattgg | 720 |
| ncatcattgg | gccttctgga | cat        |            |            |            | 743 |

<210> 364

**<211> 717** 

<212> DNA

### <213≻ Homo sapiens

### <400> 364

| aattaaatgg | ccacaagtgc | ctggtggtcc | ctttgttggt | ccacacagat | ctgcctgcct | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tgggagaggt | atctggggct | gactggtggg | tgttccattg | cagaaagctt | ctgagacáca | 120 |
| cagaagtcgc | cacagttggg | agacgtgata | cccgcagtgc | tgcagtcctg | cttgccttgt | 180 |
| tgttgttctc | tcaacttcta | cattagagac | ttagttatga | tgagtgtggc | cgcccttagg | 240 |
| aaggcatgtt | atatactcac | ttaaatgcct | cagccccctt | ttttaaaata | ctttgttcag | 300 |
| tggttaatgg | catagactag | agctagactg | caagagtttg | agccttaact | ctatcccatg | 360 |
| ttagctgtga | ccttgggcag | gtcgcctaat | ctctctgtgc | cttagtgtcc | tcaccttcaa | 420 |
| attaagataa | tacaggcttg | ttatgaggat | taaatgagtt | aatatttata | atgcacttaa | 480 |
| cacttaaaat | gttcttgttc | tttgtaattg | tttttcaaga | tgaagtgtgt | aactaataaa | 540 |
| gtgagggggg | attaacagcg | aggactggct | tgccaccaac | agagcaaatc | tttagattca | 600 |
| tattcaactc | aagcctccca | gtttcaaccc | tgtatacaac | tgtccagagt | ctgtacatgg | 660 |
| angcacgcan | ccacgtggcc | gaaaggaacc | cgctgggcan | gacaagcacg | tgggccg    | 717 |

⟨210⟩ 365

**<211>** 787

<212> DNA

<213> Homo sapiens

## **<400> 365**

| cattccctag | gaagtgcttt  | gaagaaaaac | ttgaggtata | tgaaatggtt | aaaaatcaga | 60  |
|------------|-------------|------------|------------|------------|------------|-----|
| aactaaacct | tttaacatgg  | acatcaaagc | tttgccataa | gcaattcagc | atattcctag | 120 |
| aaatgtttct | aatccataac  | ctgagagaat | gttgatctcc | atagtgtgaa | aatgacttgg | 180 |
| gccagtttaa | cttgctcttt  | tttttatttt | ttcactaatt | cccttttgtt | tttctctgat | 240 |
| aattcttctc | tttcctgagc  | ctctttagag | cagcacttac | aggattgcct | ctgtaaagcc | 300 |
| ttattcctgt | cccagaaaaag | gtaacccaaa | aagtctctag | tatccactaa | aaggtaaccc | 360 |
| aaaaatctct | agtatccact  | ggctttctcc | agtgtggaag | ctttcccctc | čacctcccat | 420 |

agatcactgg aaaggacccg aggcctcggt tctaatccct ggcttatcac taactgctgt 480 gtggctttgg cttgtccctt agtctctgtg agactgctgc accetcatct gtcaaagatg 540 gaactgaact tagttgagct ctgaggtccc tgtggacttg gcccctccac accetcatta 600 tggcaactgg acataaactt aacagaggac ttcccagcaa aatgtcctct tcttcctaca 660 aacaggctgn ttctatatgt gcatgtttca tgctaagcac ttctttcttg ggtggagatg 720 gcaaangcct ctttctgctg agacaaagtg atttgganag cacctggccc ctgaanggg 780 agtggta

<210> 366

<211> 832

<212> DNA

<213> Homo sapiens

### <400> 366

atgttacatg ttcggaaaaa ctttcagttg ctcaagggca ataagaaaat ttgaggccgg 60 gtgtggtggc tcacgcctgt aatcccagca ctttgggagg ctcaggtggg cgaattgctt 120 gageceagga gttegagace ageeggggea acatggeaaa accetgtete tactaaaaat 180 acaaaaatta gctgggtgtg gtggtgcatg cctgtagtcc cagctactcg ggaggctgag 240 gtgggaggat cccgtgagcc tgggaggtgg agtttgcagt gagctaagat cgtgccactg 300 cacteeggee tgggtgatgg ageaagacet egteteagaa aattggaaac tattgactaa 360 420 gagaagtttc taggtttgca ctgaattgtc ttttgtacat acagtgaatt gttttgctgt tctccccact ccatattaat gcaggagcca ggttggtctg ttaggatgaa caaaggttga 480 ggggagggca ggattcgtgc atctgggggc caaacacatg ttccgtcttg attgccttaa 540 gagttactag cgaggtcagt gttaggcttg caatagggat tttaaaatac actaactagt 600 tccttagcta ccttcacata cattctatag gccttcttaa attagcacta acctccactt 660 ccttctctgc cccattgcct tccaaatatg ctatggagct atttttggta ccacgttata 720 780 acgtgaatat ttatacagta gcctcttcan gctttgtaat tttcattcca aaaatgcccc 832 ggtgtgatgc tttacactct acaaagtatg ggttaaangc ncaaggtcat gg

<210> 367
<211> 652
<212> DNA
<213> Homo sapiens

### <400> 367

atocccagca agcaccaggg coogtgtgac caggccoogt coccatgoot oggggtgcag 60 tgtgcatttg gggcgacgtg tgctgtgaag aacgggcagg cagcgtgtga atgcctgcag 120 gegtgetega geetetaega teetgtgtge ggeagegaeg gegteaeata eggeagegeg 180 tgcgagctgg aggccacggc ctgtaccctc gggcgggaga tccaggtggc gcgcaaagga 240 300 ccctgtgacc gctgcggca gtgccgcttt ggagccctgt gcgaggccga gaccgggcgc 360 tgcgtgtgcc cctctgaatg cgtggctttg gcccagcccg tgtgtggctc cgacgggcac acgtacccca gcgagtgcat gctgcacgtg cacgcctgca cacaccagat cagcctgcac 420 gtggcctcag ctggaccctg tgagacctgt ggagatgctg tgtgtgcttt tggggctgtg 480 tgctccgcag ggcagtgtgt gtgtccccgg tgtgagcacc cccgcccgg ccccgtgtgt 540 ggcagcgacg gtgtcaccta cggcagtgcc tgcgagctac gggaagccgc tgcttcagca 600 gacacagatc gaggaggccc ggcagggccg tgcgagcang ccgantgcgg nt 652

<210> 368

<211> 859

<212> DNA

<213> Homo sapiens

### <400> 368

aggtatatea tectaagate ttegteaget etgacaaaca teetaggaac ceaetetaac 60 teeteattit tteatgeete etceagtget etteaeteat getgttteee ettettetet 120 tggetteaga etetggacat taatgtgaag geeceageee tgatgacaaa ggeagtggtg 180 ceagaaatgg agaaacgagg gtacagagag tgagagagag eetgggtgag aggggacace 240 acaegggetg agggeaetgg teeacaatgg gaagatggte ageteetette tttteeaga 300

ggcggctcag tggtgatcgt gtcttccata gcagccttca gtccatctcc tgtaagaacc 360 cttttgtcta cctcttccat cccacctcc actccacatc tttccacccc tcctattacc 420 caaggaagtt tgtgtcccct tgtagaatca caccaccaag tccctgccca caaaatagat 480 gccttgcctc cacaaaccac aacctagggg aggtttagcc acaagacagt tccctaactc 540 tgcccctccc ttacaggaga tccctattga gcactgccct ctatgtctag ttattagaac 600 caagaatgac ctggaaacta tgagtctaac acattctctt ctttctccag ggcttcagtc 660 cttacaatgt cagtaaaaca gccttgctgg gcctgaccaa gaccctggcc atagagctgg 720 ccccaaggaa cattagggtg aactgcctac acctggactt atcaagacta gcttancngg 780 840 atggtgaaga aagggagctt tgcatttgac tgggacccct tgnaaggcat tcatctttt 859 ggacaaggga agcccacta

<210> 369

<211> 709

<212> DNA

<213> Homo sapiens

### <400> 369

acttccgctg tcccgcgaag ggcgggggga gcgaactgtt gtggtgcgga gcgttcggcg 60 ggcggcggcc gggcgccca ggggctgccg cgggactcgg ggcgcagccg agtggctgca ggggtggagt gggccggacg agccgcgggg cccgggtgcc gcgggttcga ggccgggccc 180 240 cgcgcgagga ggccgccca ccccggggga gctgcccggc agcgagtttg ccccgctgcc gaaagaaggc gggagccggc aggggccttc gaaaccccct ggcaacccag gcccggagtc 300 360 cttggggagc ggctgtttcc tgggacgccc tcccggacac ccccgctgca gggttacggt 420 tetgggeece eggeagaagg etecteegg tgaceeegg eggggeeetg egageeggg gagccgaccc cggggcctcg agccgggagg aagggggctt ccggaggcgg agggccgggg 480 gccgagggag ccgggcctct cggacgcggg gcagggcagc gcccgggctg gagacggact 540 600 ctgggaccct cggctgcggg ggtctcagcg acctgcccgc ggcaagcgcg gccgcggagt 660 ggctaccggg gacccttccc caganggacc ggcccggggc cggggagatg aacggnttca 709 agcaccggaa ggangacaag cccgcgaaag ggccccccgg cggccccaa

<210> 370 <211> 792 <212> DNA <213> Homo sapiens

### <400> 370

aatggagtgg ttatctttgg aaaataaact gtaacacttg gagcaacagt cctgagtgga 60 120 gaaggtgagc cccgggacct gccaggagac tgtgtcttga ctatccccat cagagatgca ttttctgcta tgtcacatcc catccgttag aatcttccgg atactatatc tcatagttga 180 tggtctcttg aattcagcaa tttcatatct aaagagattc ttgaagacac catgttgtac 240 accttaaata tatatacaat ttttatttgt taattaaaaa ataaataagt gaggccagag 300 360 ttatcttact gtttttcctt aggtgagaaa aatgtaccct tccatgcctg tgctttctag 420 attttgggac tgatacagat ccacagaggc cacacctaaa attaaattat cgttagtgct 480 540 aaaacttaat tgactgtgta tataactgtg caattgctgt tactgatata actgtttggg 600 gttcattcaa cagattaaag aagcaaggtc ttgcatttaa cacacaaact aatgagatac tgctttatac aagaatttta aaaacactgt catatggttt aagtgtaagt taatgtcatg 660 720 cttatgtcat ataacatagc atgttagagt tctctagagg gacagaacta acaggatata 780 tgtacataag aaagggagtt gattggcccg gtgtggcggc ttatgcctgt aatnccanca 792 ctttgggang cc

<210> 371

<211>.827

<212> DNA

<213> Homo sapiens

<400> 371

tagcactgat tttttaaaac tatggtgact gtattcatat tagacaaagt agaaattaga 60

acaaagaata ttaccaggga taaatagagt tgtttcataa tgataaagtg gtgaactcat caagaataaa tgatcttaaa tgtttatgca cctagtaaaa taatttcagt atacatggga 180 agaaatagac aaattcacaa ttgtggtcag atttcagcac ccttccttca atagataata 240 gatcaagtag ttggaaaacc aagaaggcta tagaagactt gaacagtgct atcaaccaca 300 ttgacttaat tggcgtttat agaacgctac tcaacagcaa actgcacact ttttccaagc 360 atagecagaa cattttteaa gatagaecat attetgggtg ggaaaataag teaattaatt 420 ctgaaggatt taaatcatac aaagagtgtt cactgaccat aatggaatta aattagaaag 480 540 gaatetggaa aaatatettg taaetgaaca teacaettee aaataaceea ggggeacate ctgagacatt aaaaacatct taacaaattt aaaagaatag aaaccataca aaatactttc 600 tgagactaca gaattaaact aaaagttaat actgaaaaag tgctggaaat tttccaaata 660 tttggaaatt aaacagtatg cttctaaata acccatggat caaaggaaaa atctcaagaa 720 aaaatggtta aatatttttt aattttaatg gaaaattccg gnttatggaa accntggtgg 780 gatcaagctg gaaacagggc ttcaaaaatt gggagcattt ngatgga 827

<210> 372

**<211> 894** 

<212> DNA

<213> Homo sapiens

### <400> 372

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catctttgat caagctgcaa aacctccctc ttccctagta cacagcccat ttgtgttcgg 600 acagcccctt tccttccagc agcctcagct tcagagtgat cgaggaaaca tctcaacatc 660 ttctaaacca gcctctacat caggaaaatc agagctgtcc tctaaacaca gcagatcgct 720 ttaaacctga tggacgtatg aacccggact actgnttgat cagaagaagc ttaggggcac 780 cagaaagttt atctgctagt gaatccctta tcttaaaatc tgatgctgca aaagttgang 840 gcagattncc acagtaggtc antattcccc aacattacac cttgcagaca tttg 894

⟨210⟩ 373

<211> 7.95

<212> DNA

<213> Homo sapiens

### <400> 373

aagaagatga agaaggaaac caggtgaact cagcaaggca gactggctgc ttacttcagc 60. actattggaa ttatttcccg ctgttgccaa tggaaatcaa agaaaatgga tgtgacgtct gtgcaggtgg acggcagtcc gaggggctta tttcacttgc ttctcagtgc aacttgatag 180 gagaatccag catcttaaag ttgcatatgt gtagcactaa tgtttctttt taaatagttg ggggaaaatg acctagaaaa ccaaattgca gtttggtagc caaaattaac tcttggttta 300 tttgtccttt gtgtgtgaaa agtcctacta ttccgtgcgt cagacttcct cacagaactg 360 ttgactggtt ttggttctta gtactattga gatctttcgc gtcgatccca acggccttag 420 cggcggcaga ctggaataac accttacacc tttctggcct gcatttctgt agacttcact 480 ctcaagggag gagttttctt ttcttacgtt ttgacttttg cacaccatat gcactaggga 540 ttctggaaac ttctagcatg actgcaaagt ggccaagaga ataaagtcct tgatgataaa 600 tcacagtata tcccttgagc ctcaccttat tgccagtgct agattttttc tttttaatct 660 ctccgttttt gctaacgaaa acttgaaaag cttatttgga agcttaaatg ntttatcttt 720 .780 tetecatgga etaaacetet teaggaetet ntegeacetg gatgteeage tetngaacae 795 cagtcagatg ggcat

⟨210⟩ 374

<211> 725

<212> DNA

<213> Homo sapiens

### <400> 374

| ataaagaagg | aaaatttgtg | attcactacc | ccgaggaaga | ccaaagtgtt | aactggttat | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tttcttcctt | tgaàtgtata | ctttcatacc | ttcctttaat | gagattgaac | tcttggccag | 120 |
| gcatggtggt | cagtactttg | ggaggagtaa | tcccagcact | ttgggagggt | aaggcaggag | 180 |
| gattgcttga | gcccaggagt | tcaagaccac | cttcagcaac | aaagtaagac | tccatctcta | 240 |
| caaagaaaag | aaaaaattag | gtgggtgtgg | tggtacactt | gtggttccag | atggtgggag | 300 |
| gctgagacgg | gaggatcact | tgattccagg | agtttaaggc | tgcagtggtt | tgtgttcgtg | 360 |
| gcactgcact | ccagcctggg | tggcagagca | agaccctgtc | tcaagaaaaa | agaaattgaa | 420 |
| ctctccccaa | aaatgatgtg | agaatttaac | tgtggaggag | accagatact | cttgggtgat | 480 |
| gtgacctgtg | atacttctcc | tagtagacac | tgaatgatga | gaagctgggg | atcataggaa | 540 |
| tagctgtatt | tttcaaatgt | ttgttggtaa | cgagtgagga | acctgatgca | tccagctcca | 600 |
| gagtaaggnt | tatttgccat | ggtaacactg | gataagtaca | ttggtgcctg | natttccaag | 660 |
| taatttatca | tttctgnätt | ttagtaaaca | tacatatata | cagaaaagtg | cacaaataan | 720 |
| tggac      |            |            |            |            |            | 725 |

<210> 375

<211> 747

<212> DNA

<213> Homo sapiens

### <400> 375

aaaaaaaaa aaagtttcca tttctttcaa atagagttgc tgcctgctat atgcaagaag 60 attggttcca gtacaccctg agtataccta aatccacaga tgccagctct tttataaaat 120 ggaatattcg catgtaccta cccacattct cctgtatact ctataaatgt ctagattaat 180 taaaatatct catgcattgt aaaagctgtg tacatagttg tattgtttag ggaatcataa 240

gaaaaaaaat ctatatgtgt tcagtacaga cccaaccatt gcaggcctat ctacatcgta 300 tatatcacct ataatgttac agtttcttgt ttcaatactc agattacttt tgtctaatga 360 cctgaaagaa tgtgttaaca ccaaccgcaa ttctggttct tctctcttga taacccaagt 420 attacgatgg ttatgacaat gatgattgct gtatggtgcc taatgtgatg tgtagaggtg 480 actagatgtg tggcatcata...gataaacagt gagacctcag gctaacttga atcttgacag 540 gacatcaaga ccttcatcta tgttggaaga cccaggttct gattgaagat gttgactctt 600 660 tgcaggaggc taatactaat gtcagcatct gttcagcttg agggctgaag atgtttgtgt 720 tgaanggtat gtcttcatat ttgcagatat ttagttagaa acattggttt angaagctag 747 ntctttttct ttgaatccct aaaaaaa

<210> 376

<211> 820

<212> DNA

<213> Homo sapiens

### ₹400> 376

cgctttctgt cagcctctct ccctctccct ctcccctctc cttcctctcg cttcctctct cgcacctgag cgtacgcacc tgcccgggcc cggctccctc ctcctctcc ctcctcttt 120 cccgcccgg ccgcgggagc ctcgtggctg cgtcaccgcc gccccccag acaagatgga 180 caccgcggag gaagacatat gtagagtgtg tcggtcagaa ggaacacctg agaaaccgct 240 ttatcatcct tgtgtatgta ctggcagtat taagtttatc catcaagaat gcttagttca 300 atggctgaaa cacagtcgaa aagaatactg tgaattatgc aagcacagat ttgcttttac 360 accaatttat tetecagata tgeetteaeg getteeaatt eaagacatat ttgetggaet 420 ggttacaagt attggcactg caatacgata ttggtttcat tatacacttg tggcctttgc 480 atggttggga gttgttcctc ttacagcatg ccgcatctac aagtgcttgt ttactggctc 540 , 600 cgtgagctca ctactgacgc tgccattaga tatgctgtca acggaaaatt tgttggcaga ttgtttgcag ggttgttttg tggtgacgtg cacactgtgt gcattcatca gcctggtgtg 660 gttgagagag cagatagtcc atgggggagc accaatttgg ttggagcatg ctgcccaccg 720 tcaatgctgc gggcatcacc aaaatgaggc ttcagcagga aggaaatggt gcaanaaaat 780

### gttgctgctg atcaagcctg ntaacccacc agctganaac

820

<210> 377 →

<211> 861

<212> DNA -

<213> Homo sapiens

### <400> 377

ctagcttaac ttcatttaaa gaataaatta atcgttttta aacttatgcc agcagttgtt aatteecaga tggeaggtga actetetaaa cattittita aaactittea teaaatagta attecatttt aacccaaaaa tagetttttg ttttetttet taaaacatga ceatgatgea 180 tegteaatea aaataaaetg aagtatttat taattaeage tgtattgatt tetaetetaa 240 actgactice teegaaatet agtatgitte atgitteaag aattaatite tigatggiae 300 tctgctgcac tgtaatttag tcatggtgga ttgagtcacc agatattaag acagtcatga. 360 ttgcaaatga cagatggcat ccagtggctc accattgttt gtacctcttg gtacccattt ctctgaagct acaagtacag ccatgaggca gtggtaactg tcttagttgg agtctcagag 480 ctcatgcttc atttattccc aaggcaaggc actaaaaagc catagttgga gctggagcac 540 ttgccaactt gtatttctgc catttagaag gtgctcagtc cctacatcta aaatttgaag 600 ggaaaggaaa tetteeatat gaatgeeact tttegttatt tteeagacea teacatetta .660 cttttccttt cattcaacaa tgataactta ttcgccaaca cttttcaaga atgtgtttac 720 atgaaagcag agcaagcatg ttaagagacc cagactgcaa ataactttgg acgggttcag 780 tgtaattcaa agtgagtcat cctgcctcan ttaccgaatg acagctctga tgacagaact 840 861 tggaaaagct acccngancg g

<210> 378

<211> 887

<212> DNA

<213> Homo sapiens

# <400> 378

| aaaatggacg | taagatttta | tccacctcca | gcccagcccg | ccgctgcgcc | cgacgctccc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tgtctgggac | cttctccctg | cctggacccc | tactattgca | acaagtttga | cggtgagaac | 120 |
| atgtatatga | gcatgacaga | gccgagccag | gactatgtgc | cagccagcca | gtcctaccct | 180 |
| ggtccaagcc | tggaaagtga | agacttcaac | attccaccaa | ttactcctcc | ttccctccca | 240 |
| gaccactcgc | tggtgcacct | aactgccatg | catcctagtc | tccccaggaa | catagccccc | 300 |
| aagccgaata | accaaatgcc | agtgactgtc | tctatagcaa | acatggctgt | gtccctcct  | 360 |
| cctccctcc  | agatcagccc | gcctcttcac | cagcatctca | acatgcagca | gcaccagccg | 420 |
| ctcaccatgc | agcagcccct | tgggaaccag | ctccccatgc | aggtccagtc | tgccttacac | 480 |
| tcacccacca | tgcagcaagg | atttactctt | caacccgact | atcagactat | tatcaatcct | 540 |
| acatctacag | ctgcacaagt | tgtcacccag | gcaatggagt | atgtgcgttc | ggggtgcaga | 600 |
| aatcctcccc | cacaaccggt | ggactggaat | aacgactact | gcagtagtgg | gggcatgcag | 660 |
| agggacaaag | cactgtacct | tacttgagaa | tctgaacacc | tcttctttcc | actgaggaat | 720 |
| tcaaggaagt | ggtttcacca | tggattgctt | tgtacagtca | aggcagttct | ccattttatt | 780 |
| agaaaaatca | agntgctaag | cactttagga | ccatttgagc | tttgggggtc | acccacttct | 840 |
| gggaagaaat | agtcatgctt | ctttaataat | tttttnaanc | ctttaag    |            | 887 |
|            |            |            |            |            |            |     |

<210> 379

<211> 862

<212> DNA

<213≻ Homo sapiens

| atgtaaattt | tcccattgtt | cttaagcaag | tcattaaaat | taaatataac | tatgaatgga | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| gagtgtttta | ttctttcaat | tacatagggt | ttgtgaagag | tcattctttg | tctacttata | 120 |
| tttaatcaac | atgcaatatt | ttatgtgcct | tattaccatg | tgttaagaag | gtaatattca | 180 |
| cgttacctag | ctatttttta | cattagccaa | aaaaatatgg | ttatgtgcaa | atattgtgaa | 240 |
| gaacatgcat | gcaagtagtt | tgcttattaa | ccaggtttgg | tgtcagccac | acacttataa | 300 |
| agctaataat | tgctagctat | taatattata | actttagttc | aaatattact | gatgtctgtt | 360 |

cttctaagac tgaatgttaa gattagaatt tagaatttag tacaagtatg tataaatcat 420 ttcaacagaa aaaaatgaat gcaaatcagg aaccagctgg aggcagattt gcatgattat tttaatgctg tgacaggacg tgaacactca gaaattcgaa ttaggatgct tatttctcat 540 atctacaatg agcactgagt ctctcttatg atgtggccag ctatcaccct gtgttatcag 600 caaaccctac taatagaaat ttgagagtet aatatcaaac ttactettee tatttgnttt 660 ctctgagccc tgggttagaa gactgatatg aaataagcat ttttactata ctgagctatc 720 cgtatcattt cattattggt gttgcttaga aattctncac aggntttcaa aagataaatc 780 atgccatttg attatcagca ccatttggcc aatcagcacc caaatcaatg gactcttgcc 840 tggcagccct nttaaaaaaa tn 862

<210>.380

<211> 581

<212> DNA

<213> Homo sapiens

### <400> 380

| ggatccacgg | ncgcacagct | aaacagcaac | cccctacccg | cttcgtctcc | ctccgccgct | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| atcggggcct | aagcgggagc | ggctggcacg | gcgtcactgg | gtgggctggg | gcggaagtgg | 120 |
| aggcggaggg | agacggtggc | agtcgtccgc | ggggccctgg | gctctcgcgg | cgaggccctg | 180 |
| gtgggcgcga | ggcatngggg | agggggagga | ggaggagccc | gcggcccggg | cggcggcggc | 240 |
| tctcgggttc | tccgtagggc | cccgcctcgg | agcgggcggc | ggcggaggag | gagactgagg | 300 |
| agcaggatgg | cggnctcggn | cctgtacgcc | tgcaccaagt | gtacccagcg | ttatcctttc | 360 |
| gaggagctct | cccagggcca | gcagctctgc | aaggtccgtg | ggctccggga | ggcgggcggg | 420 |
| atgggtgtcc | tcggccgtag | ccggaggggg | ccgggtagcc | gctgcactgc | agcccctctt | 480 |
| cgccggcgcc | tcaggggttt | gggagtctgg | agccctcgnc | ttcccactcg | gggacccctt | 540 |
| tttctggggg | ctngaacatt | anctgggaac | ggaccctgaa | a          | • ,        | 581 |

<210> 381

<211> 673

## <212> DNA

# <213> Homo sapiens

### <400> 381

| tcttcttagt | cactacttcc | cacagagtta | accattgcca | agattagctt | taatctttaa | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| aaataacctg | agattagctt | tgcctgttct | gaaaatttac | atgcatttaa | ttagacgata | 120 |
| tgcattattt | ggagtttggg | agtcttcagt | tattgtgtat | agcaggggcg | ggtttgttct | 180 |
| cattgctgta | tattttactg | tacaaccgtg | ccactcagtt | attcatttta | ctgatgacag | 240 |
| agacttaatt | ggttccagtt | tgggactctt | aggaatagtg | ctgctgtgaa | catttggcga | 300 |
| tgtgtccctt | gatgtacata | tttgtgtatt | tctggtgggt | atatactgag | gaatggtatg | 360 |
| tgtatggtca | tagggcatat | gtaccatcag | ctttagtacc | agtagatact | gccaaacgat | 420 |
| tgtccatatt | gagcatcttc | ttaatgcttt | ttttgtgggg | gtgaaggggg | cagagtttca | 480 |
| ctcttattgc | acaggctgga | gtgcaatggc | acgatttctg | ctcactgcaa | cctccgcctc | 540 |
| ctgggttcaa | gcaattctcc | tgcctcagcc | tcctgagtag | ctgggattac | aggcatgtgc | 600 |
| caccacacct | ggctaatttt | atatttttag | tagagacagg | gtttctccat | gntgatcang | 660 |
| ctggncttga | act        |            |            |            |            | 673 |

<210> 382

<211> 858

<212> DNA

<213≻ Homo sapiens

| attactttcc | ttcccattgt | caataatgac | ttctttatgt | cttaggctgt | attataaatt | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| caaacacagg | aatgttattc | ttgccttttt | ccatcagaat | tacctaaagt | tttattagac | 120 |
| tttccccta  | cttgcaaatc | tgcctggagg | ttctggtctt | taggaagtag | cacttagcaa | 180 |
| gttctggata | agcactccag | aatttgggat | gagttatcct | tgttgtttgt | ccagctctat | 240 |
| cttggacccc | agtgctgcta | attagattca | tgccttgttc | tttagggcat | aagttcctct | 300 |
| cttggctatt | tttcctagta | tgctgagaac | taggattccc | tttcagtgac | agagtcctgc | 360 |

cctggaaccc caatcaagag cctaaagttt aactactctc tgagatatta gcctgatgcc agcagcctgc ctggatctct aaatattacc cattctggga gttgttagtg gtctctgctt 480 tcctgcagtg tcactcctgc ttcctcattg ggcctgctag ccacagctac ttggatgtac 540 ccgaacctgt tgccttgccc tacctctgtg ggctggttca gttctgcatt cccattccag 600 tgtccactgc cttctcgcta tccctcccat ctgtgcgcca ccaccagctt atccccagcc 660 720 ctgctaacat gacaaactat tgtgcatttg agtgcccact atacaatgtg tgaatataac 780 cgtgcttgta agcattgact ttaatgtctg ggatgatccg ctagagtcca tggnaccctn ctgnggtttt tcatcccttt cttaagtaat cttgggaaat cccttatgaa atcttttct 840 aacatttctt tgctgaac 858

<210> 383

<211> 767

<212> DNA

<213> Homo sapiens

### <400> 383

gatteetgeg gacceagetg tggcgacgee aggagacece aagetgeate geegagtgga agcaactaga actocagggo tgtgaaagco acaggtgggg gctgagcgag gcgtggcoto 120 aggagcggag gacccccca ctctccctcg agcgccgcag tccaccgtag cgggtggagc 180 ccgccttggt gcgcagttgg aaaacctcgg agccccgctg gatctcctgg ctgccacccg 240 cacceccege cagectacgg tgcgcccgcg ggcccagett ctctctgcgc tgctccccgt 300 taaattccct ggggagacgg aagaaaaggc aaaggaagtc ggttctccag gggccagaag 360 tgttgagcct aattagtctt cagacttctc aatgaggaat cgcttatcag tttcttatct 420 gggagagttg aggatggagg gacagaaggc acccaggatt tgcacggggg ggattcaggg 480 agagaggtg atgagggacg gggtgggcct tccagtcttg gcccagtccc catcttgcac 540 acattgttgg cttcctctta gagccgttcg ccccctggg gaggggagac ccatagtgac 600 660 ctctcctgac acccgccgac cctgaccagt gttgccgggt tcttcaaagg ccacgctctg 720 acttgctggt ctgtgtcacc tgcacccccc agccccaccg tanaagatgc cttctttggt gacggcgctg ggtcangcca ggtcctttgg ccccgggatg gccccna 767

` <210> 384 ...

<211> 779

<212> DNA

<213≻ Homo sapiens

## <400> 384

| ataaggtata | aggaaggggt   | ccagtttcaa  | ttatctgcat   | atggctagcc  | agctctccca  | 60   |
|------------|--|---|--|---|---|--|
| gcatcattta | ctaaatagaa   | aatcctttcc  | ccattgcttg   | tttttgtcag  | ggttgttgaa  | 120  |
| gatcagatgg | ttttaggtgt   | gtggtcttat  | ttctgagttc   | tctattctgt  | tccattggtc  | 180  |
| tatgtgcatg | tttttgtacc   | agtaccatgc  | tgctttggtt   | actgtagcct  | tgtaatatag  | 240  |
| tttgaagtca | ggtagggtga   | tgcctccagc  | tttgttcttt   | tttgctgagg  | attgccttgg  | 300  |
| atattcaggc | tctttttggt   | tccatatgaa  | ttttaaaata   | gtttttttcc  | taattctatg  | 360  |
| aagaatgtca | atagtagttt   | aatgggaata  | gcactgaatc   | tataaattac  | tttgggcagt  | 420  |
| atggccattt | tcacaatatt   | gattcttcct  | atccatgagc   | atggaatgtt  | tttccatttg  | 480  |
| tttgtgtctt | ctctgatttc   | cttgagcagt  | ggtttgtggt   | tctcctcaaa  | aaggtccttt  | 540  |
| gcttcccttg | ttagttttat   | tcctaggtat  | tttattctct   | ttgtagcaat  | tatgaatgtg  | 600  |
| agtttattca | tgatttggct   | ctatgcttgc  | atgctggtgg   | tgtataggaa  | tgctagtgat  | 660  |
| ttttgcacat | tgattttata   | tncccagctt  | tgctgaagtt   | gcttatcagc  | ttaanaactt  | 720  |
| ttgcactgag | acaatggagt   | tttctaggnc  | aggatcatgg   | catctgcaac  | caagataat   | 779  |
|            | gcatcattta gatcagatgg tatgtgcatg tttgaagtca atattcaggc aagaatgtca atggccattt tttgtgtctt gcttcccttg agtttattca ttttgcacat | gcatcattta ctaaatagaa gatcagatgg ttttaggtgt tatgtgcatg tttttgtacc tttgaagtca ggtagggtga atattcaggc tctttttggt aagaatgtca atagtagttt tttgtgtctt ctctgatttc gcttcccttg ttagtttat agttattca tgatttgct ttttgcacat tgatttata | gcatcattta ctaaatagaa aatcctttcc gatcagatgg ttttaggtgt gtggtcttat tatgtgcatg tttttgtacc agtaccatgc tttgaagtca ggtagggtga tgcctccagc atattcaggc tctttttggt tccatatgaa aagaatgtca atagtagttt aatgggaata atggccattt tcacaatatt gattcttcct tttgtgtctt ctctgatttc cttgagcagt gcttcccttg ttagttttat tcctaggtat agtttattca tgatttggct ctatgcttgc ttttgcacat tgattttata tncccagctt | gatcagatgg tittaggtgt gtggtcttat tictgagttc tatgtgcatg titttgtacc agtaccatgc tgctttggtt tittgaagtca ggtagggtga tgcctccagc tittgtctt atattcaggc tctttttggt tccatatgaa tittaaaata aagaatgtca atagtagtt aatgggaata gcactgaatc atggccatt tcacaatatt gattctcct atccatgagc tittgtgtt cttgtgtt tccatatgaa tittaaaata ggcactgt tcacaatatt gattctcct atccatgagc tittgtgtt ctctgatttc cttgagcagt ggtttgtggt gcttcccttg ttagttttat tcctaggtat titattctct agtttattca tgatttgtc ctatgcttgc atgctgggt ttttgcacat tgattttata tncccagctt tgctgaagtt | gatcagatgg tittaggtgt gtggtcttat tictgagttc tctatictgt tatgtgcatg titttgtacc agtaccatgc tgctttggtt actgtagcct tittgaagtca ggtagggtga tgcctccagc tittgttcttt tittgctgagg atattcaggc tctttttggt tacatatgaa tittaaaata gttttttccaagaatgtca atagtagttt aatgggaata gcactgaatc tataaattacatggccattt tcacaatatt gattcttcct atccatgagc atgggatgtt tittgtgttt ctctgatttc cttgagcagt ggtttgtggt tctcctcaaa gcttcccttg ttagttttat tcctaggtat tittattctct ttgtagcaat agtttattca tgatttgct ctatgcttgc atgctggtg tgtataggaatttttgcacat tgatttgct ctatgcttgc atgctggtg tgtataggaatttttgcacat tgattttata tncccagctt tgctgaagtt gcttatcagc | gratcattta ctaaatagaa aateetttee eeattgett tttttgteag ggttgttgaa gateagatgg ttttaggtgt gtggtettat ttetgagtte tetattetgt teeattggte tatgtgeatg tttttgtace agtaceatge tgetttggtt aetgtageet tgtaaatatag ttttgaagtea ggtagggtga tgeeteeage tttttttttt |

<210> 385

<211> 715

<212> DNA

<213> Homo sapiens

<400> 385

aagtccccta tacccaaata tggtttaggc ttgattgaaa acttagcttg ggcatttttc 60 tttaaacata acgttttgtt tagcaaaagg aaacttgttc ttttttggtt catggttttc 120

ttactgaaga ttctactact tatttgaggc taaactgtag ctagtatctt tgagcttttc ttgaaggagt ttgaagttca ctattagtga tttgggcttt tggaccatgt ctataagtga catgggaccg gctgtcactg acaggaccct tccagggagg ctgtgtaaca cccacgggcc 300 cctgacagta actctgtgca gtgagtgggt gggggcctct cacagtggct gggaaccagc 360 420 cagagcaggg atgagggagc agactgtctg ggccccaggg cagactgaaa aggatggaga gaaaccccag gatggggtcc tcctccttat gtgtttttaa gttgatgttt ggcttggctg 480 540 ggtttccgta ataaaaatcc ttggagtgca gggctagtcc tgctggcccc agcagaaagt 600 cgaggactic ctagatgict giggigcaac agggcaggat ggggccgigt tagcgctccc 660 aggagacatt aggaggcaca ggcatgggtg ggtgcatcct tttcctcaac tggatctgaa 715 gactneacce aaccettnaa gaagatggaa atgeagttge ceagaaaceg naett

<210> 386

<211> 747

<212> DNA

<213> Homo sapiens

#### <400> 386

ccaggcatta aatatatgat ataatatgca tgtgtgttat ttttgtaagt ggattcttag 60 aaaatataat gttetgttte tggtttttea ettaacagta ttgtaggtae ettetetgee 120 ttaatgegta caaatetget ctaccecete eetgeataag eattetgata catgactett 180 gtaattttaa tgtagctttc tgttggtaga tctatatatt ttcctttttt ttttttttg 240 ttaggaaaat atattgtgat agcgtggggg taagttgcat gttacatact atgtttttga 300 acacttacaa agtttctaaa agtaaattcc tagaaatgtt atagctcttt ctggggagca 360 agcagggatt cagaataatc cccatatttc attttgttcg tttgttttaa tttgttatca 420 tacagtgtta teggeaattg aaatacaaat attgtgtgaa etttgaagaa aatattttta, 480 tttgttcatt ccccttagca gagttgctga gtctcattcc taatttgagg cctagacttt 540 600 tgggaaaaca cagaggacgt ccacctttta gagaacagtg ataacttacc aatgggggtt tgccggttgg gagttattct ggtatgcata atgcatacag gccacttgaa ggtagaaggc 660 720 aactattett tittettige tietggiggn tittggitgg ingniggitg geiggitggi

### tgaagatttg ggggaagtta tccagga

747

<210> 387

**<211> 812** 

<212> DNA

<213> Homo sapiens

<400> 387

acttaaagta catatatcta ttgataaggc agcaatacaa gaattgaata gatgtgtggc 60 agagagaaga gaagaacagc totttagato tggtgaagat gatgaggtca agaggagtac 120 tccagagaag aatggaaaag aaatgttgga gcagacatta cagaaggtca ctgagttgga 180 aaatcagctg aaatcttttg agaaaaggtc gagaaaatta aaagaaggga ataaaaaatt 240 aatgaaagaa aatgattttc tgaaatccct cttaaaacag caacaagaag atacagagac 300 cagagaaaaa gagctagaac agataataaa ggggagtaaa gatgtagaaa aagaaaatac 360 tgaacttcaa gtaaaaatca gtgagctgga gacagaagtc acttccctga ggagacaagt 420 ggcagaagct aatgcattga gaaatgaaaa tgaagagctg atcaacccaa tggagaaatc 480 acaccagtca gcagacagag ctaaatccga gatggccacc atgaaagtga gatctggacg 540 600 atatgattgt aagacaacta tgaccaaggt taaatttaaa gctgcgaaga aaaattgctc tgtgggtcgt caccacactg ttctcaatca ttccatcaag gttatgagca atgtgtttga 660 gaacctcagc aaggacggct gggangatgt gagtgaaagc agtgattctt gaagcacaga 720 cctcttcaaa ctttgggaac cattatttgt aggaaaccat tcccagaaaa ataaggtcct 780 taccggaagg aatgggaaaa ngancccnga aa 812

<210> 388

<211> 890

<212> DNA

<213> Homo sapiens

aggitegaat eteegeeget tegeggitge tieteaaegi eegggeegea teteggegge 60 ggcgagggct gagcgcggga gctgcctccg agccggagcc ccagccctag gccctgcgcg 120 agetgeeceg ecctaecece tecagegtee tgtegeetee tegecegaet teggeetgte 180 cetetetege gegeteagte etegetette geeceeegea getateggea eteggtetee 240 cgcgcctggc gggctccgcc cgagcctctg ggcccatggc caagcggcgt gcggccgagc 300 eggtgaegtt ceaegtgeet tggaagegge teetgetttg egaetteget gageageege 360 cgccaccgcc tctctggatc cggccgcccg gggtcgcgca tgctgggcag ctcctcggcg 420 teccagagea geacegaaag egeaaaateg aegeagggae eatggeagag eeeteggett 480 540 cgcccagcaa gcgccgtgac agcggggaca acagcgcccc gagcggccag gagcgtgagg accacggtct ggagacaggc gatccgccgc tgccgccgcc gnccgtactg ccggggccgg 600 -660 gggaggaget cccgggcgcc cggctcccgg ggggcggtgg cgacgacggg gcggggcgcg cangacecee geggggggaa etggggggte geategtgee aageacaatg aagaattttg 720 ggcagtatta ataccttnca atacttggaa ggaaatcctt ttggccttcc taattggatc 780 ttgggcaaga catttggaag aatttnaagg tggaaagacc accccttgac aggaaagcca 840 accactttta aggggcaang ggaaatgnaa agggggcctt gaagggttga 890

<210> 389

<211> 624

<212> DNA

<213> Homo sapiens

### <400> 389

cccttcctgg gatgggccag acaagcagag cctggtcagg cggcttttgg cagtctacgc 480
actccccagc tggggccggg cagagctggc actgtcactg ctgcaggaga cacccaggaa 540
ctatgagttg ggggatgtgg tanaagctgt gaggcacagn caggaccggg ccttctgcgc 600
cgcttgcttg cccangagtg tgcc 624

<210> 390

<211> 590

<212> DNA

<213> Homo sapiens

<400> 390

cttcccgtcc cagcacgcca cgctgtcagc cttcgccgcg gtctatgtgt cgatgtactt caacteggte atetnggaca ceaecaaget getgaageee ateetggtet tegeetttge 120 catcgccgcg ggcgtatgcg ggctcacgca gatcacgcag taccgnagcc accctgtgga 180 cgtgtatgcc ggcttcctca tcggggcggg catcgctgcc tacctggcct gccacgcggt 240 300 gggcaacttc caggccccac ctgcagagaa gcccgcggcc ccggcccccg ccaaggacgc 360 gctgcgggcc ctgacgcagc ggggccacga ctcggtttat cagcagaata agtcggtgag 420 caccgacgag ctggggcccc cagggcggct ggagggcgcg ccccggcccg tggcccgcaa gaagaccccg cgcgccgcca catgaccatc cacgtgccgc tggacgcctc gcgctccaag 480 540 cagcicatca gcgagtggaa gcagaagagc ctggagggcc gaggnctggg gctgnccgac 590 gacgccagcc ccgggcacct gcgcgcgccc gncgaaccca tggcggagga

<210> 391

<211> 788

<212> DNA

<213> Homo sapiens

<400> 391

aagcgtcatt cagtcattcg atgctgcaat acttcaagag ggcggctgtg ggccatgcac

| caaccccacc | cacgttcacc  | cgggcccttc | cagctccaat | ccagggggtc | tggaggatgc | 120 |
|------------|-------------|------------|------------|------------|------------|-----|
| ctgcaatgtc | cccttttaca  | ctaaagaaaa | caagcgccag | tcaggtggaa | gtggcctcta | 180 |
| actagtcact | ccgctgggca  | catggtctct | gtagtcagag | actcccttt  | gaccttgccc | 240 |
| ttcactttag | aaatgcatat  | cacaggctac | ttcatccaga | ccagaaagga | ctccagtgtt | 300 |
| ttcagttggg | agaaaaaagcc | ctcatcagaa | atgggatcat | tttcctggcc | ccatcagccc | 360 |
| ttcgaaattt | ggcccagctc  | cctaaaggtg | tgtttcagga | aagggtgcag | gcacgcctgt | 420 |
| aacctggccc | acacctacaa  | gcttggggct | ccaggctctg | aatatctggg | gacgtgcagt | 480 |
| gtcgggtgac | ttcttcgtca  | ccacgctgtg | ttccttctcc | gagtgcccac | ctactctgtc | 540 |
| cagcttaaag | gatgaattgc  | acagatgcaa | acatttccca | cagaggagag | tgaggggcat | 6Ó0 |
| gccaggatca | ctgnaagggt  | ccctgcagcc | aggtttctag | ggatcaaggt | ctctacagga | 660 |
| ctcttccagc | aaaagcaggt  | cccctcgtgg | aatgggtctc | tgagtgccct | ggtgaatata | 720 |
| ttctccatgc | ctgctttgaa  | aaaatccctt | tggctntctt | tggntcatcg | ngatgaaacc | 780 |
| tcttttaa   |             |            |            |            |            | 788 |

<210> 392

⟨211⟩ 859

<212> DNA

<213≻ Homo sapiens

| aatcatgtta | gattttctga | gagtgaaaac | acctgccatc | tacaaattac | aaggctggat | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| aacagctcac | tccatttgaa | attcagtgga | aacccaagag | ctaggttctt | actgaatttg | 120 |
| catctcaatt | tgggaaactg | aacttagctt | tcaaagatca | taggaagtct | ggttggagaa | 180 |
| actagggatt | attctggcaa | tgggtgcagg | aaggtggtca | gaataaccca | gtcgccattg | 240 |
| gttttgagaa | acggaactat | cttatgcaga | gcccggaggg | caagtctcag | acccatgggt | 300 |
| tgaagccatg | gagaaggaaa | tttggatcca | atgtaatgaa | gcgctttcta | agtcagaatt | 360 |
| tccctgcaat | ggtgtggcct | gattcaataa | aaattaagaa | taataaatat | aatggaaaaa | 420 |
| aatctccact | gattgagtgt | ttacttggtg | ccaagcacta | tgctaagttg | ttcattattt | 480 |
| tatttaattg | ttacagcaat | tttgagtatg | catctttcac | tattttataa | gtggaaaaga | 540 |

| gaagtgcccc  | caaaaagtta | gagctcaaac | agcagcttat | tctaccagcc | cctgctcttg | 600 |
|-------------|------------|------------|------------|------------|------------|-----|
| cggaggcctc  | tggaaaagac | ctgaatgaca | cctattggag | aatcacatct | acaaggggct | 660 |
| tcaaacagac  | caaatagatc | atcacctctg | tggtcccttg | gtaactatat | gttctgagac | 720 |
| aaaggaaagc  | tccctaaggg | ttagttaacc | tttgctgagg | aaatttacat | tcatacntag | 780 |
| agtgaattac  | tcaggtgtgc | cttaggtgtg | caaaaaggga | aggagancct | gaattcacca | 840 |
| aggttaaatc. | ttgctaaan  |            |            |            |            | 859 |

<210> 393

<211> 614

<212> DNA

<213≻ Homo sapiens

<400> 393

| ccctttcacc | tccaattccc | gtgatcccaa | aagaagagga | agactccagg | aggggtatag | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| attgtgccgt | catagcttta | caggtggttt | taaagttagc | aggggtttgt | catggtgatt | 120 |
| cactactcag | tttaccagct | caaggattat | acagctcttt | tccgggaact | cacccaggag | 180 |
| caagcgagac | actaccattg | aatcagggaa | tgagaattaa | gaatggacag | gaccaagaca | 240 |
| gaactcaaga | aagccactgg | ggaaaactcg | agaagaaagg | gtgtatacta | gtaggttaga | 300 |
| tctgtgaacc | tgaggacaag | aagaccttgg | gaaatggagg | cctcagggga | tgtgcattca | 360 |
| catactatta | cgcttctcaa | agagagacca | acatcatgct | tttaacacat | ttgatgaggt | 420 |
| tttttatttg | tgtttttgtt | tgttttttg  | agatggagtc | tcactctgtg | gcccaggctg | 480 |
| gagtgcagtg | gcgcaatctt | ggctcactgc | aacctccacc | tcccaggttc | aggtgattct | 540 |
| cctgtctcgg | ncttccaagt | agctgggact | acaggcatga | gccatcacac | ccagctggnt | 600 |
| ttttgngttt | ttgg       |            |            |            |            | 614 |

<210> 394

<211> 752

<212> DNA

<213> Homo sapiens

# <400> 394

| tcacggtttg | gcctcggaga | ggtccgaggc | aagtacattt | cttaaaaggt | aataaaatgc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| attattggaa | agttggacag | tcaggccacg | actcctagcc | cacggcgtgc | cccacctccc | 120 |
| agcagcccct | tcagcccctt | gccctgttg  | ccccaaacct | cagggttccc | tcttgcatat | 180 |
| tcatggggga | accacagtgc | tgatgtgcac | ttccccactg | tcagctcggc | tgcacctcgt | 240 |
| gtggcgccag | gtcccaaggg | cctctgcaga | ggccaggctg | tgagcccctt | gcctgcctgc | 300 |
| tccctgatg  | aggcaacagc | ttctctgaaa | tgagctgccg | gccaggagca | ggcaggcacc | 360 |
| agcctgtctt | tccttttctg | gtaattcctc | agcactgagg | ctccgttcct | gggcacccca | 420 |
| ggattgaagg | gaacctcaga | atcatgtcac | tgccattcta | gagtttcaat | ccaaggggtc | 480 |
| ccctttagct | catctccaag | atgggtaaac | gtagccacca | ttcagaaagc | ccagaaattc | 540 |
| ttgttcccac | atcttagacc | cctgagcaac | acaaggágaa | aatgcagctg | cttacctatt | 600 |
| aatatctact | gagggacaat | cagcaaagcc | tcaaaggagt | cgtctcaggt | agggtacttg | 660 |
| gcctgtggca | ggagagacag | aggcacaaac | ccacccaccc | ataacttccg | gtggctgatc | 720 |
| ggggcccang | gagggaaaca | ngtgaaacan | ca         |            |            | 752 |

<210> 395

<211> 685

<212> DNA

<213> Homo sapiens

| cttgatgcca  | tgttaagaat | gatgtgaatt | cttcccagtt | ctgccctggt | gctagacatt | 60  |
|-------------|------------|------------|------------|------------|------------|-----|
| gccccatact. | ttcaattaga | cactagctgt | atctaaatag | tcccactcag | taaacttaca | 120 |
| tcttgaaaaa  | caagaccagt | aagaggccag | tgaaagtact | aaagaaagaa | accaatgttg | 180 |
| tgtgagtttc  | aaagcagctg | caatgctgtg | taaaagtaga | gtgttcattc | tccatttcca | 240 |
| agagtģtttc  | agaataggat | gtcttaagac | ttcagtcatg | tcagagattt | ttttttttag | 300 |
| gtgattattg  | agtttctcct | tctcctttaa | gtcatcacct | tccttttatg | aaatgatagt | 360 |
| aaggaactcg  | tctattctga | aaggcatttg | agaaatagct | gaattcctgg | ctgctttttt | 420 |

<210> 396

<211> 812

<212> DNA

<213> Homo sapiens

### <400> 396 ·

aaaattetgg ceatttgeee teetteeeee ettegteege teteattgge tetgetgeag 60 ccctgaccaa cgctccaata ggccgggatc cagccatact tcaatggatc ccaggggtat 120 cttgaaggca tttcccaagc ggcagaaaat tcatgctgat gcatcatcaa aagtacttgc 180 240 aaagatteet aggagggaag agggagaaga ageagaagag tggetgaget eeetteggge ccatgttgtg cgcactggca ttggacgagc ccgggcagaa ctctttgaga agcagattgt 300 tcagcatggc ggccagctat gccctgccca gggcccaggt gtcactcaca ttgtggtgga 360 tgaaggcatg gactatgagc gagccctccg cettetcaga etaccccage tgeccceggg 420 tgctcagctg gtgaagtcag cctggctgag cttgtgcctt caggagagga ggctggtgga 480 tgtagctgga ttcagcatct tcatccccag taggtacttg gaccatccac agcccagcaa 540 ggcagagcag gatgcttcta ttcctcctgg cacccatgag gccctgcttc agacagccct 600 ttctcctcct cctcctcca ccaggcctgt gtctcctcc caaaaggcaa aagaggcacc 660 aaacacccaa gcccagccca tctccgatga tgaaccagtg atggggaaga aacccaggtt 720 agtgeanetg atetggaage ceteateant ggeeactace cacetteett gagggaaatt 780 gggagcctac ccanccctgc tgcctggata aa 812

<210> 397

**<211> 815** 

# <212> DNA

# <213≻ Homo sapiens

# <400> 397

| ggaggcaaac | aacccatctc | tcttggagaa | tccacacttc | gtttcttcta | ggtccagcct | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| aaatgttacc | tcctccaggg | agcctttcca | gatactgctt | ctcctctctc | ccccaactcc | 120 |
| ctcccacaaa | tgaagttttc | tcttctgaat | tccttgctgg | tactgtcact | tatattcttt | 180 |
| tgggtagatc | tctgggcatg | catatgtcac | ctcctgtgac | tgtgggtttc | ttgacaacct | 240 |
| aatcaatgca | ttgaacaaag | gagatgttta | gacaacccat | ataaaatgaa | taagagaaat | 300 |
| agggtgaata | ccgtctaccc | caattgcaat | cagattagtt | tcctttattt | tgaaaacgat | 360 |
| tagaactagt | agaggagtta | gatgtggccc | actagggaac | aaattttcat | ctccaagccg | 420 |
| tcctctggct | cgatcgggtc | tgcactgggt | ctgcatcaac | ttgcgctggc | tcagagggag | 480 |
| gctcagcccc | agcctggcct | tcctggtgcc | cactcccaac | atcctgagca | gggccgactc | 540 |
| taggcacccc | acgattagct | gagtgatcta | gggcaaggac | ctaggcgtct | ctaagtctta | 600 |
| gtttccccat | ctgaacaatg | tggataatga | cacgtacctg | gggtgggcag | gctagagtaa | 660 |
| atgggaaaat | caaagcgcca | gccagagcgg | gtcgcactgt | tagttcctgt | attttctcct | 720 |
| cctgcctctg | gtttcttccg | tccgntctag | ctgcctgaag | acccagcccg | acagcgatgc | 780 |
| ctgtcaancc | cgcgtcgccc | accanggcag | ctgct      | ,          |            | 815 |

<210> 398

<211> 840

<212> DNA

<213> Homo sapiens

| ttgttgttgt tgttttgaga cagggtctca ctttgtcacc caggctggag tatagtg | ggca 60  |
|--|----------|
| caaacatggc tcactgcagc ctcgacctcc tgggctcaag cagtcctcct gcttca  | gccc 120 |
| cacaagtagc tgggactaca ggcacacacc accacgccca cctctacaaa aaattg  | taaa 180 |
| aatgagccag gcatgtggtg gtgtatgcct acgatcctag ctactcagga ggctga  | agtg 240 |

300 ggagaatttt ttgagcccag gaggtggagg ctgcagtggg ccataatggc aacactgcgc tccagcctgg cagacagagg gaagatatgt ttgacatagt ttagatattt gtccccaccc 360 420 aaatccatgt tgaaatgtaa tccccaatgt tggaggtggg gcctagtggg aggtgtttgt catgggggcg gateceteat ggettggtge tgteettgtg atagtgagtt caetteatgt 480 gagatetggt taaagtgtgt ggcacetteg cetacececa ettgtteeca ceaagtgaga 540 ttcctgctcc tgcttaccct tctgccatgt ttcttgaggc ctccagaagc caagcagatg 600 ccageteeat geteeetgta cageetaeag aageatgage cagttaaace tetettettt 660 ataaattacc caagtcctga gtatttcttt atagcaatgc gagaacggnc tacacaaggn 720 totagtaggg agaaactagc angtaaatgg atcccagaca gcactettac atttttaatt 780 acaggtccct ttgagtagac caaactttaa gaatagggga aatcattacc tatnaattgn 840

<210> 399

⟨211⟩ 830

<212> DNA

<213> Homo sapiens

### <400> 399

gacagagatt gaactcagct atgcaaagca actcaggaat ctttcaaaga agtaccaacc taaaaagaac tegaaggagg aagaagaata caagtataeg teatgtaaag ettteattte 120 caacctgaac gaaatgaatg attacgcagg gcagcatgaa gttatctccg agaacatggc 180 atcacagate attgtggact tggcacgeta tgttcaggaa etgaaacagg agaggaaate 240 300 aaactttcac gatggccgta aagcacagca gcacatcgag acttgctgga agcagcttga 360 atctagtaaa aggcgatttg aacgcgattg caaagaggcg gacagggcgc agcagtactt tgagaaaatg gacgctgaca tcaatgtcac aaaagcggat gttgaaaagg cccgacaaca 420 ageteaaata egteaceaaa tggeagagga eageaaagea gattaeteat eeatteteea gaaattcaac catgagcagc atgaatatta ccatactcac atccccaaca tcttccagaa: 540 aatacaagag atggaggaaa ggaggattgt gagaatggga gagtccatga agacatatgc agaggttgat cggcaggtga tcccaatcat tgggaagtgc ctggatggaa tagtaaaagc 660 agccgaatca attgatcaga aaaatgattc acagctggta atagaagctt ataaatcagg 720

gttttgagcc ttctggagac attgaatttg aggattacac tcagccaatg aagccactgn 780 gtcanataca gcctttcaaa ttcngaggag aagcaaccag acttaaattg 830

<210> 400

〈211〉 850

<212> DNA

<213> Homo sapiens

#### <400> 400

taaagaactg cataggtgat ttcctaaaaa ctttggaaga cccagatttg aatgtgagaa 60 gagtagcctt ggtcacattt aattcagcag cacataacaa gccatcatta ataagggatc 120 tattggatac tgttcttcca catctttaca atgaaacaaa agttagaaag gagcttataa 180 gagaggtaga aatgggtcca tttaaacata cggttgatga tggtctggat attagaaagg 240 cagcatttga gtgtatgtac acacttctag acagttgtct tgatagactt gatatctttg 300 aatttctaaa tcatgttgaa gatggtttga aggaccatta tgatattaag atgctgacat 360 ttttaatgtt ggtgagactg tctacccttt gtccaagtgc agtactgcag aggttggacc 420 gacttgttga gccattacgt acaacatgta caactaaggt aaaggcaaac tcagtaaagc 480 aggagtttga aaaacaagat gaattaaagc gatctgccat gagagcagta gcagcactgc 540 taaccattcc agaagcagag aagagtccac tgatgagtga attccagtca cagatcagtt 600 ctaaccctga gctggcggct atctttgaaa gtatccagaa agattcatca tctactaact 660 tggaatcaat ggacactagt tagatgtttg gtcaccatgg ggaccattac atatgaccat 720 acaatgcact gaattgacag gttaatcata agacatggaa agagaagtgt ctaaaagctt 780 caaaatggtc actitititc citciggaga cigitggtig gctitctica tigiggtitg 840 nacattaatt 850

<210> 401

<211> 730

<212> DNA

<213> Homo sapiens

# <400> 401

| tactggccat | tgctgcctgg | ctacccgggg | aggaggaggc | gcaggagtga | gctgcccgag | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| accgcagggc | aagtaagcgg | ctgacggcgg | aaagaccctg | gggaaggggc | tttgcggccg | 120 |
| gctagaaaca | ttttccccaa | gcggctccgc | aaaatgacca | gcctgttccg | ccggagcagc | 180 |
| agcggcagcg | gcgggggtgg | caccgccggg | gcacgcgggg | gcgggggagg | cacggccgcc | 240 |
| ccccaggagc | tcaacaacag | ccggcctgcc | cgccaggtgc | gccgcctgga | gctcaaccag | 300 |
| gccatggacg | acttcaagac | catgttcccc | aacatggatt | acgacatcat | cgaatgcgtg | 360 |
| ctgcgcgcca | acagcggcgc | tgtggacgcc | accatcgacc | agctgctgca | gatgaacctg | 420 |
| gagggcggtg | gcagcagcgg | cggcgtctat | gaggacagct | ccgactcgga | ggacagcatc | 480 |
| ccccggaga  | tcttggaaag | gactttggaa | cctgatagct | cggatgaaga | gccccacct  | 540 |
| gtgtactccc | cgccagccta | ccacatgcac | gtgttcgacc | ggccctaccc | tctggctccc | 600 |
| ccgactccgc | ctcccgtat  | cgacgcgctg | ggctctggag | ccctacaag  | ccagagacgc | 660 |
| tatcggaact | ggaacccacc | actggntggg | caaccttncg | gatgactttc | ttccgcatnc | 720 |
| tggcccagca |            |            |            |            |            | 730 |

<210> 402

<211> 795

<212> DNA

<213≻ Homo sapiens

| ggacaatgtt | gaatgaatgt | ctggctcagt | gatggagagc | caggttcatc | tttgaaatct | 60   |
|------------|------------|------------|------------|------------|------------|------|
| agggctcttc | actcatgaag | cagactccta | gtcctggagt | gactgtgtac | gagagcgtgg | .120 |
| ttgtggtgct | gtatgtgaac | gcatgcaagc | ttgattcacc | ttcagggggc | tgataaccta | 180  |
| gtaaatcatc | aaaatgagat | cataagtgtt | aatgtacact | ggacatgaaa | acaaagactg | 240  |
| gtttagcagc | agacattggt | ttactctgca | gcctgtgttt | tctgtttccc | cctttcccac | 300  |
| ctccttcccc | ccacccaatc | ctttttttt  | ttcttttttg | cttttctttt | ctttttttt  | 360  |
| agtttttatt | tactttacct | agtatgcctt | tttttagttg | cttctcaagt | cagaaaactt | 420  |

ttcaggaagg tttccctgtg catttgcacc agatgaatgt ttgatgctat gaaaagcttt 480 ccatatcatc aaaactaatt tgtgtagatt tttgcatgaa aaaaatcata aatttccctc 540 aaaatagact gtgttgcagt acacaagttg ccataatagt ataaaacagt aaaatgtgct 600 taaaaggcca cccttttcat tttcagagat aacataaaga tctttgcatg aggtaaatct 660 acagcatagt tcatttttag attttgttga gtcctgtaaa gaagaagaag aaaaaagttt 720 cagttgnggt anaataccgt gctgngttta aatggtactt ggtttcaaac tttggtttct 780 atgaaaatga tatgg

<210> 403

<211> 853

<212> DNA

<213> Homo sapiens

### <400> 403

actttttgct tcaaaggaca ctagcaataa agcgaaaagg caattaaaag agctggaaaa atatttgtaa accatatatc aggtaacagt ctagtattca gaatagataa ggaactctta aaactgacca ataaaaagat aaaccattta aaaaatgaac aaaaaattta atagacattt geettagtet gttggaactg etattacaaa etaecataga etaggtaget tgtagtaaca 240 gatttatttc tcacagttct ggagactggg aattcctata tcaaagtgcc agcagatttg 300 gtgtctggtg agggccttct tccaggttca cagatagtgt cttactaagt tctcacatga 360 420 tagaagaagt aggggtgcta tccagagtct cttttataac agcactaatt ccattcataa ggactetgee etcatggeet tateacetae caaagtgeee aetteetaat geeageaeat 480 tggagattag tatttcaaca tatgaatttt gggggataca tattcaatcc atagcctgcc 540 acccettgee teccaaaatt tatgttttte teacaageaa aagacattge ateccaacag 600 660 tecteaaaat ettgatteat teeageatea acetaaaatt taaaaeceae agteteaeet 720 aaatatcatc taaatcagat atgggtgaga ctcaagatat gattcatctt gaggcaaatt 780 gtccctagct gtgacactgt gaaaccaaat aagccatatg cttncaaaat acagtggtgg 840 gacagggata gaatagcata tccattncaa aagggagaaa tacaaagaag aaaaggtanc 853 aaatccctgt agt

<210> 404

<211> 864

<212> DNA

<213> Homo sapiens

## <400> 404

| tttgcgctcg | gggaattaaa | agaggggaaa | aaaagcccga | agaaaactca | cgccccaaac | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| aaaacgcaag | gagaggaggg | cgcgcggcct | gcagccctcg | cccgcgtccc | cggccgcggc | 120 |
| gtgatgcgcg | cggaccagcc | cgcgacgccc | gggctgccgc | tgtccccgca | cctggacgct | 180 |
| ggcgcggtgg | ccgcgcccca | gcctcgatcg | ctcgccgcgg | cgactcggcc | ccaggcttcc | 240 |
| ggcgccggtg | ggggccctcg | ctctccatgg | ggctgaggga | ctggctgaga | accgtgtgct | 300 |
| gctgctgccg | gtgcgagtgc | ttggaggagc | gcgccctgcc | tgagaaggag | ccctcgtca  | 360 |
| gtgataacaa | tccatattcc | tcatttggag | caactctggt | gagggatgat | gagaagaatt | 420 |
| tatggagtat | gccccatgat | gtgtcccaca | cagaggcaga | cgacgacaga | accctgtaca | 480 |
| atttgatagt | cattcgtaat | cagcaggcca | aagactcaga | ggagtggcag | aagctcaact | 540 |
| atgatatcca | taccctgcgg | caggttcgaa | gggaagtaag | aaacagatgg | aagtgcatct | 600 |
| tagaagattt | aggttttcaa | aaggaagctg | actctttgnt | gtcaagtgac | taaactcagc | 660 |
| accatcagtg | attcttaaaa | cacaaggaaa | gctcgagaga | tgtttgntaa | aactggcttg | 720 |
| aagaaaccag | tattttccca | acaaagttgg | gaagettete | agagagatat | ctctttgttg | 780 |
| nggaccgtct | tattgcactt | gatgctcaga | agagtcttta | agcttgttgt | cgaacttccc | 840 |
| caanaagctg | gggttcatgc | tgna       |            |            |            | 864 |

<210> 405

**<211> 830** 

<212> DNA

<213> Homo sapiens

atgtatgate tgttggtgta cacaccatgg gtaaggtatt gettgeacat aatttgetet gcatattatg gaccattgtg gtttcttcca gtcacttaga tggaaaggag gttaaaccta 120 ggtacttttt agcaaggata taaagtcaaa ttcagcatat gtttttattt ttaggcttga 180 cttttacaag acattaatct ccatttgtac atatgttatt ttatttgtaa aaccaaatat 240 gactcaacac ctttttgatg agtagtgact taactaagat ttacaagtaa tatttagaca 300 gattcagtca gacaccactt agccattttt acattccctc tggttagatt tggtacagta 360 taattaagac tttaatctga aatttaaagt agttttaatt ctgaagaagt tacatcctct 420 gtattattta catgcaacaa aataaaagtg gattaatata gtaatgccat ggtaacaata 480 gagctatgtc ttatgcatga aggcaacttt ggatgtttta acacatttga ctgactttgg 540 tttagtgaat gctgacaatg ctgctctact taggtttcct atgaaatttt taagaatggc 600 tatgagactg tatagaagct tctagagaac tgaaagtcat aatgcagagt tgccttttct 660 agtgcagcta agtggcggcc tcaactgaag atatgagttt ctttgggttc ttggagttat 720 caaatggatc ttgcattatg ttactttgca aatactgaag taatgatctt acctaatacc 780 acacctgtna cattgctcac attatanagt atttcntcac taattaaata 830

<210> 406

<211> 848

<212> DNA

<213> Homo sapiens

#### <400> 406

gtagttggga acagcggaac gctggtcccg gggactgagt aaggtgtctg gatcggaggg 60 aggttcgggt gggcatcggg cggctggaag agctcgactc gtcccgctgg gaaagcgcga 120 gtctgagtgg aaccetggae gacttgeaga geggetggeg eagteatgge ggactaetgg 180 aagtcacage caaagaaatt etgtgattae tgeaagtget ggatageaga caataggeet 240 agtgttgaat ttcatgaaag aggaaagaat cataaggaaa atgtggcaaa aaggatcagt 300 gagattaaac agaaaagcct ggataaggca aaggaagaag aaaaggcatc aaaggagttt 360 getgeaatgg aggeagetge eetgaaagea taccaagagg atttgaaaag acttggetta 420 gagtcagaaa ttttggagcc aagcataaca ccagtaacca gcactatccc acctacctcg 480

acatcaaatc aacagaaaga aaagaaagaa aagaagaaaa gaaaaaaaga tccttcaaag 540 ggcagatggg tagaaggcat aacctctgag ggttaccatt actattatga tcttatctca 600 ggagcatctc agtgggagaa acctgaagga tttcaaggag acttaaaaaa gacagcagtg 660 aagaccgttt gggtagaagg tttaagtgaa gatggtttta cctattacta taatacagaa 720 acaggagaat ccagatggga gaacctgatg atttcattcc acacactatg atctgncttc 780 tataaggtca atgaaaatcc ttgcacccta atgaatccaa tcatcagatt ccatagngat 840 ctgatggg

<210> 407

<211> 846

<212> DNA

<213> Homo sapiens

| ctgccgcggc | tttgcgggga | cgggggagtg | gtagtggggg | ctgcagctgc | cggacccagg | . 60 |
|------------|------------|------------|------------|------------|------------|------|
| cgcgatggct | acgggcgcgg | atgtacggga | cattctagaa | ctcgggggtc | cagaagggga | 120  |
| tgcagcctct | gggaccatca | gcaagaagga | cattatcaac | ccggacaaga | aaaaatccaa | 180  |
| gaagtcctct | gagacactga | ctttcaagag | gcccgagggc | atgcaccggg | aagtctatgc | 240  |
| cttgctctac | tctgacaaga | aggatgcacc | cccactgcta | cccagtgaca | ctggccaggg | 300  |
| ataccgtaca | gtgaaggcca | agttgggctc | caagaaggtg | cggccttgga | agtggatgcc | 360  |
| attcaccaac | ccggcccgca | aggacggagc | aatgttcttc | cactggcgac | gtgcagcgga | 420  |
| ggagggcaag | gactacccct | ttgccaggtt | caataagact | gtgcaggtgc | ctgtgtactc | 480  |
| ggagcaggag | taccagcttt | atctccacga | tgatgcttgg | actaaggcag | aaactgacca | 540  |
| cctctttgac | ctcagccgcc | gctttgacct | gcgttttgtt | gttatccatg | accggtatga | 600  |
| ccaccagcag | ttcaagaagc | gttctgtgga | agacctgaag | gagcggtact | accacatctg | 660  |
| tgctaagctt | gccaacgtgc | ggctgtgcca | ggcacagacc | ttaagatacc | agtatttgat | 720  |
| gctgggcacg | aacgacggcg | gaaggaacag | cttgacgtct | ntacaaccgg | accccaaanc | 780  |
| aagtggcaaa | aggaggagta | cctgctacag | gacttcncaa | gaatgaggcc | cgaaaaagga | 840  |
| acggga     |            |            |            |            |            | 846  |

<210> 408

⟨211⟩ 838

<212> DNA

⟨213⟩ Homo sapiens

### <400> 408

| gtgccgtccg | cccgtccgtc | tgcccgcagg | cattgcccaa | gccagccgag | ccgccagagc | 60   |
|------------|------------|------------|------------|------------|------------|------|
| cgcgggccgc | gggggtgtcg | cgggcccaac | cccaggatgc | tccctgcgc  | ctcctgccta | 120  |
| cccgggtctc | tactgctctg | ggcgctgcta | ctgttgctct | tgggatcagc | ttctcctcag | 180. |
| gattctgaag | agcccgacag | ctacacggaa | tgcacagatg | gctatgagtg | ggacccagac | 240  |
| agccagcact | gccgggatgt | caacgagtgt | ctgaccatcc | ctgaggcctg | caagggggaa | 300  |
| atgaagtgca | tcaaccacta | cgggggctac | ttgtgcctgc | cccgctccgc | tgccgtcatc | 360  |
| aacgacctac | acggcgaggg | actcccgcca | ccagtgcctc | ccgctcaaca | ccccaacccc | 420  |
| tgcccaccag | gctatgagcc | cgacgatcag | gacagctgtg | tggatgtgga | cgagtgtgcc | 480  |
| caggccctgc | acgactgtcg | ccccagccag | gactgccata | acttgcctgg | ctcctatcag | 540  |
| tgcacctgcc | ctgatggtta | ccgcaagatc | gggcccgagt | gtgtggacat | agacgagtgc | 600  |
| cgctaccgct | actgccagca | ccgctgcgtg | aacctgcctg | gctccttccg | ctgcagtgcg | 660  |
| agccgggctt | cagctggggc | ctaacaaccg | ntcctgtgtt | gatgtgaacg | aatgtgacat | 720  |
| gggggcccca | tgcgagcagc | gctgcttcaa | cttctatggg | accettetgt | gtcgnttgcc | 780  |
| acaaggctat | gactgcatcg | ggatggcttt | tctgcatgat | attgatgatg | taactact   | 838  |

<210> 409

**<211> 844** 

<212> DNA

<213> Homo sapiens

<400> 409

aagagttaaa tgaaatactg gttttttaaa tggttagaac agagactgat gcacataagt 60

atteattatt ataatteagt ttttgeatte tttaaagtga agetgtgttg ttgeagtatt ttaaggatat attgttcccc aaatttttgg gtaaaattga ctgttaagga agatgagtca 180 tgtttaaact gtaattgtga gtagaccacc ctttatcctt gaagggcttt ctcaaccagg 240 tgaatggcat ggctgtggtg ggaaatacag ggccctgtga gacaggaaat ctagggggtt 300 gtctagctcc attaccatcc tcttctttta tggattcagt gtcttgttct tttgttccat 360 gtgagaatca tccctgccct gcctacgtta taaagctgga gaaaaatgaa ataagtaaaa 420 480 acacatggaa aacgtactaa aatattaatg caaggatgca aggtataatc tttgctggaa cattagttcc tcatttatta gtaacattac aggcatttga aattatgtac tttatatggg 540 600 acctatattt taaatatatg ctaatcatcc tagaagccct acaaggtagg tgttactttt 660 ttccatttta ccattaagga aattatccag gtttacacaa cttgaaccca ggtctctgtc 720 aacattagtt gaatgcaatg tggtgtatca cccaangtcg gctggcatct ttgaaaacca 780 taactatgtg ttactcagca tcttagcacc tagccaaaga agtggagaat nttacagtct 840 844 ttca

<210> 410

⟨211⟩ 827

<212> DNA

<213> Homo sapiens

#### <400> 410

ttctcctttc gcctatatgt aagtatgtgt tctgcaggct gatatcatag gccaggttac 60 cataggccaa gttaccagga ttaattacag gtcagatcac aatgtaataa gcactaggaa 120 agcaaatttt tggcctactc agttcaagaa gtgttcactg tcagaattta aaataagtaa 180 atgacctcag agacaatcca gtccaagtcc cttattttat acttgagggg actgaggcct 240 gaagagattg acttgtctaa gctcctagca gttagaagaa ccagaaatag attgcagatt 300 gccagatatc caaagaatct ggtatctttt cttctactat aatggactag atgtagtttt 360 taaatgaatc agcaactggc cctatacctg gcaacaaagt gagcactcaa attgtcaaag 420 gcacaaaaag gccagatgta acatggcgcc cacctcttcc aaggtcagtg ggggggtttt 480

cagttgccac ttgaggggaa caggtgtaga agagtagtga gcaacttaca gctctccaac 540 cacgctgttg caggaagctc cgagatgaaa ctaccttctc cttctgtctg gagagtgact 600 ggcctggagg ggtgaaggtg gaccttgctg gcaggggact cgcactagtc tggaggagac 660 agattcagca gctgaaccga gtcagcctgg aaatggccag tgcanttgtg aatgcctatc 720 ccttcccaca gctcctggta cangcttatc agcagtgttt ttcggataaa gaacgccaga 780 atttgctcgc agacatacag gtgccccnt gggggaangt gtgacat 827

<210> 411

<211> 834

<212> DNA

<213> Homo sapiens

#### <400> 411.

ttgaacctat gatgaatgaa agaaatgaag tttcctatat aggtggttat gtcataagtg 60 ttatatcata agtggtgtta tagtatcatt attacctact atcaggaata atttcttttc 120 acteteteat tattettgte actgttgaat gteteaagag ttgtgtgtgt atteagttte 180 tatttccctc tctgtctcat ttactgactc cagtctgact aatgctctaa tatgctcttg 240 agaagtcacc atgaactcca tgttgctgag cccagtggac actttctgtc ctcctactta 300 acctetetge acagatagat teegtacaga gagaaagttg atcactteet etetteteag 360 cttctctgac accaattctg tatttttctt ctaccccttt ggctaatctt gatttttaag 420 acactttgtg ggctaacaaa acattctgtg gaatgagttc aacatatatt acaatttccc 480 ctttttaaaa atcatgttat tetgttteat ttacagetet teacattetg tattgatttt 540. taaaaatatt ttaaaattgt ttctctttcc tccactttga aagctttatg aaagaataat 600 ttctgtctat tgcctaatac tgtgtatcat cactgtgctt gacacgtagt tggtaatctc 660 taagtatttg agaagcagtg agttaattaa tatttgcttt tttgactttt ttagggtatt 720 taagtatttt tgacatctct ttttgggaat ggggtaaaag aattgtagag gactattaaa 780 834 tgaccagngt aaccattgtt gtaaatggtg ggtaatatga cttgggaata atgc

<210> 412

<211> 833

<212> DNA

<213> Homo sapiens

### <400> 412

| aaaaaaatac | cgctttcaca  | aaactcgctc  | cgcatgaccc   | acagaacacc   | 60   |
|------------|---|---|--|--|--|
| aagagtccaa | agttcagaaa  | gaaaagttat  | ctgagtagac   | tgatgctcgc   | 120  |
| ccgttctctg | cagcgaagag  | cctcataaat  | tcccttcac  | aaggggcttt   | 180  |
| ggagacctga | gtcctcaaga  | aaaccctttt  | ctggaagtat   | ctgctccttc   | 240  |
| atagaaacca | ctaatataaa  | agacacaact  | gcaagaaatg   | ccttggaaga   | 300  |
| atggaaaaca | ctaacatgcc  | agaagtcacc  | atctctgaaa   | acacaaacta   | 360  |
| cctgaggcag | attccgctgg  | gactgcattc  | aacttagggc   | caactgttaa   | 420  |
| acaaaatggg | aatacaacaa  | cgtgggcact  | gacctgtccc   | ccgagcccaa   | 480  |
| tacccattgc | tcagtttgaa  | attcagctaa  | cccagcagct   | acagtccctt   | 540  |
| acaatgtgag | aaggctcatt  | tctcatgtta  | tccggacctt   | gaagatggac   | 600  |
| cccatgtgca | agtgacctgt  | gccaagctca  | tcttcaggac   | aggccacctg   | 660  |
| tcagtgggca | gcangaagta  | aaggcatctg  | agatagaatg   | ggatccgacc   | 720  |
| tgagaactac | attaatgaga  | gcacggaagc  | ccagagtgac   | ngaaagagaa   | 780  |
| ctcccaaaga | agtttcagga  | tacggtattc  | tgacaactna   | ttt  | 833  |
|            | aagagtccaa ccgttctctg ggagacctga atagaaacca atggaaaaca cctgaggcag acaaaatggg tacccattgc acaatgtgag cccatgtgca tcagtgggca tgagaactac | aagagtccaa agttcagaaa ccgttctctg cagcgaagag ggagacctga gtcctcaaga atagaaacca ctaatataaa atggaaaaca ctaacatgcc cctgaggcag attccgctgg acaaaatggg aatacaacaa tacccattgc tcagttgaa aaggctcatt cccatgtgca agtgacctgt tcagtgggca gcangaagta tgagaactac attaatgaga | aagagtccaa agttcagaaa gaaaagttat ccgttctctg cagcgaagag cctcataaat ggagacctga gtcctcaaga aaaccctttt atagaaacca ctaatataaa agacacaact atggaaaaca ctaacatgcc agaagtcacc cctgaggcag attccgctgg gactgcattc acaaaatggg aatacaacaa cgtgggcact tacccattgc tcagttgaa attcagctaa acaatgtgag aaggctcatt tctcatgtta cccatgtgca agtgacctgt gccaagctca tcagtgggca gcangaagta aaggcatctg tgagaactac attaatgaga gcacggaagc | aagagtccaa agttcagaaa gaaaagttat ctgagtagac ccgttctctg cagcgaagag cctcataaat tccccttcac ggagacctga gtcctcaaga aaaccctttt ctggaagtat atagaaacca ctaatataaa agacacaact gcaagaaatg atggaaaaca ctaacatgcc agaagtcacc atctctgaaa cctgaggcag attccgctgg gactgcattc aacttagggc acaaaatggg aatacaacaa cgtgggcact gacctgtccc tacccattgc tcagttgaa attcagctaa cccagcagct acaatgtgag aaggctcatt tctcatgtta tccggacctt cccatgtgca agtgacctgt gccaagctca tcttcaggac tcagtgggca gcangaagta aaggcatctg agatagaatg tgagaactac attaatgaga gcacggaagc ccagagtgac | aaaaaaatac cgctttcaca aaactcgctc cgcatgaccc acagaacacc aagagtccaa agttcagaaa gaaaagttat ctgagtagac tgatgctcgc ccgttctctg cagcgaagag cctcataaat tccccttcac aaggggcttt ggagacctga gtcctcaaga aaaccctttt ctggaagtat ctgctccttc atagaaacca ctaatataaa agacacaact gcaagaaatg ccttggaaga atggaaaaca ctaacatgcc agaagtcacc atctctgaaa acacaaacta cctgaggcag attccgctgg gactgcattc aacttagggc caactgttaa acaaaaatggg aatacaacaa cgtgggcact gacctgtccc ccgagcccaa tacccattgc tcagttgaa attcagctaa cccagcagct acagtccctt acaatgtgag aaggctcatt tctcatgtta tccggacctt gaagatggac cccatgtgca agtgacctgt gccaagctca tcttcaggac aggccacctg tcagtgggca gcangaagta aaggcatctg agatagaatg ggatccgacc tgagaactac attaatgaga gcacggaagc ccagagtgac ngaaagagaa ctcccaaaga agtttcagga tacggtattc tgacaactna ttt |

<210> 413

<211> 678

<212> DNA

<213> Homo sapiens

### <400> 413

aaagcgccat tacgcagaga gaaagttacg aggttcgtgg ccgcggtttc cccaggcagc 60 tggcgctgga ggcttcggcg tcacgtgctg gtctggattt ttctcgatgc actggggaaa 120 gcggtggact cttatcgtgg gagggctctt gatctgtgat ttatagatag gcacagctac 180

tcccgttcgg gaacccaacg gcagacaggt cctagtgccc atcagatacc cgcggccggg acteggaget gtggggtgtg gggaggegga ggeaceaact aagagegaee tageategea  $-300^{\circ}$ aagccgccct cggggcgctc atggcgggac gcctcctggg aaaggcttta gccgcggtgt 360 ctctctctct ggccttggcc tctgtgacta tcaggtcctc gcgctgccgc ggcatccagg 420 cgttcagaaa ctcgttttca tcttcttggt ttcatcttaa taccaacgtc atgtntggtt 480 ctaatggttc caaagaaaat tctcacaata aggctcggac gtntccttac ccaggttcaa 540 aagttgaacg aagccaggtt cctaatgaga aagtgggctg gcttgttgag tggcaagact 600 ataageetgn ggaatacaet geageetetg tettggetgg acceangtgg geagateete 660 678 ngatcaggga aagtaatt

<210> 414

<211> 789

<212> DNA

<213> Homo sapiens

### <400> 414

cttcatgtga attttccaat tttggtgttt ttcatagaaa acttcaatgc cagaccagct 60 120 tecetggtta ettageatat attigtgace atticatatg caeteataaa tateeaagga 180 tttcaggccc agccaagaaa aacataagaa gggaggtaaa aaggatgttg gacattgact tagtgtactt tttaaaccca acaaaagcga tgtggtgatt atctcccttt tcgaaggatt 240 300 catgccactg taatgagaga ggcagtgtag gcaaatggtc tgagccttgg atggagattg 360 aagtootgao ttoagotggg aaatottggt taagagtott totgtacott agtttoocta agtgagaata agagagttgg acaagacgaa tgtatctcca ggttccaatt tttctgagaa . 420 tggttgatag agaagetget eteteettaa aatgeatgga eteaatgget tgaagatatt 480 ccccatgggg aaccattgcc acggaggcct tgcatgcaag aagtttgggt ggggacagtg 540 aggaactgaa acacaagcac cttccaccaa ttattgctgt gaagaacctg agcctgaaga . 600 agetecatet aatttttte ecagagttee agattttagg gtgeaateat ecageetata 660 720 catgtggctc atagttcaaa aaattaaaag caaaaccaga actctncagt aggaatggag aaaacctatc tgtaggctga actggcttct ttggcttaag angcactggt cangggaaaa 780

| aagctgctt                               |            |            |            |            |            | 789  |
|---|------------|------------|------------|------------|------------|------|
|   |            |            |            | •          |            |      |
| <210> 415                               |            |            |            |            |            | •    |
| <211> 284                               | •          |            |            |            |            |      |
| <212> DNA                               |            |            |            | ·          |            |      |
| <213> Homo                              | sapiens    |            |            |            |            |      |
| 4 · · · · · · · · · · · · · · · · · · · |            |            |            |            |            |      |
| <400> 415                               |            |            |            |            |            |      |
| ctctctgcgg                              | ggcgccgttc | ccgcgccacc | gagggcagct | aactcctagc | agaggaccgg | · 60 |
| ggtcgcggcc                              | gccgggggcg | cagcgcggtt | agggcggccc | cgccacggcc | caggcactcc | 120  |
| cgctgggccc                              | tgccgggcct | cacccttccc | cgcgcagcga | ctcgggaagt | aggacatcct | 180  |
| gtggagagcc                              | caggacccgg | gagacgccct | gggaggaggt | ggcagggatg | ggggcgatgg | 240  |
| ggggtcagag                              | cggtctaggg | gtgaccaggg | tggggtgcgg | annn       |            | 284  |
|   |            |            |            |            |            |      |
| <210> 416                               | •          | •          |            | •          |            |      |
| ⟨211⟩ 771                               |            | : .        | •          | •          |            |      |
| <212> DNA                               |            |            |            | -          |            | . /. |
| <213> Homo                              | sapiens    |            |            |            |            |      |
|   |            |            |            |            |            | • .  |
| <400> 416                               |            |            |            |            |            |      |
| attgcctccc                              | cgacccacac | tggctggact | actgcccagg | acagaagagg | ggggttggct | 60   |
| gtgagtgggg                              | aggaggtgga | agcggtagat | tcccagcaca | accttcttcc | tcccaccccc | 120  |
| aaaacctcca                              | tctgaagaag | gcctgaggaa | gctgtcaggc | tgcctgcctg | attcatccct | 180  |
| tccctctggg                              | cgtagccact | gagtctgctg | ggctgatgct | tctgaataca | aactatggca | 240  |
| cctggaaggc                              | actgcagaga | aaggggggac | ctcagggctc | ccattccatc | actcttgagt | 300  |
| ctaggtcata                              | ccctccacaa | tccccaagag | gcccgtactg | tctcttctga | tgggactcct | 360  |
| gggttctgtg                              | ttgcccaccc | tgcaaatctg | catgccagca | agtatgggtg | acccggctgg | 420  |
| ctgctgggtc                              | accttcattt | gggtgctagc | cttgctgcct | tcctttggtg | ctgttgagat | 480  |

tgtccttgcc gtgttcactc ccagcgcagg catgccctgg ccccaggctg tggctccgat 540

tcactcttac tgccatgctt tggtctcatt ttttgcttcc acagtaagtc tgcacaaaat 600 actgtcctca cagctgagct tacctggtga tctattcttt tttctcggtc actacttgtc 660 cagctttttt ttttanactt ttggagacag tgattgacaa cagaacctaa caccagggct 720 gcgctagtcc cctacccctt canacctgtg tcangcatat gactgatgga t 771

⟨210⟩ 417

<211> 866

<212> DNA

<213> Homo sapiens

## <400> 417

cacagotgga atgtggttgg cttgttgact tctgttccca gcatagtgaa cagtgggcac tataagccag taggcactca attgatgatt cttcaatgaa ataattgatg ccacttttag 120 gtcagtcttt cttgtacgtt acaccttctg ttgttcaaca gagccccaca atatcccaga 180 acttggaggt cttatctcgg ggtttctcag atgttggagt acccaggtat cacctgctga gccagtttcc ctggcctcac ctgcaggggc tctgagtcag taaatctggg gcaggcccag 300 tactttgcat gtgagcacag acccaggtgt ttctgaacct ggtggtccag ggactgctgc 360 420 aggaaggage caataggaet geatgeetta caggeagtgg gteteateea teeetateta tggcactgac tacaggccat gtccaggcca catgggcaca tgctattata attattttgt 480 gcgatggatg agttacagaa ctggagccct aagacctgag ttctagtttc agctctgcca 540 gttgctggct gattgaaact gaacaagcca cctgccttcc ctgagactgt ctcttctcct 600 gtgaaattag ggcattagaa tacatgaaga cccctttatg tccttaataa cctgtaagtt 660 720 taagaaccta gggaatctnc atgctggtgg ctgcgggtat atccccttat cctcaactcg ngaagaaaga gtcaaaatgg caacanggtt gtgtcaactg ctcttcttag caagcttatc 780 attaagggga aatggccttt ggcaattttc ccagccctta acaacattnc cacaacgggc 840 naccattnac cttaaaccat ttgggg 866

<210> 418

<211> 797

## <212> DNA

# <213> Homo sapiens

# <400> 418

|   | aatccattgc | agctcgtctt | atcaatgcta | cctttttatt | tttttctttt | ttgagttagg | 60  |
|---|------------|------------|------------|------------|------------|------------|-----|
| - | gtctcactct | gttacttagg | ctggaataca | gtggcatgat | cacggctcac | tgcagcctta | 120 |
|   | acctcctggg | gtcaagccat | cctcccacct | cagcctccca | agtagctggg | actacaggca | 180 |
|   | catgccacca | cgcctggcta | atttttgtat | tttttgtagg | gacggagttt | cgccatgtta | 240 |
|   | gccaggctgc | ttttgaactc | ctgagctcaa | gcaatctgcc | tgcctctgcc | tcccaaagtg | 300 |
|   | ttgggattac | agaggtgggc | cactgtgcct | ggccttctaa | tcaatgatac | ctaattctgt | 360 |
|   | cttcggtcag | tggaactcaa | ctcaatttgt | ctcctgagtc | cttttgaaac | tattctaatc | 420 |
|   | ttgtcagttt | cctcgctttc | tggtatggta | agatttccag | gatcatgttg | tacattttca | 480 |
|   | gtccagatct | gaaatcagtc | atttctccaa | ggagccctgg | ttttgttgga | aatggtattt | 540 |
|   | agcaaccagt | ctgggcaata | agcaaattca | ttgccacttg | tttggtcata | ggccttttcg | 600 |
|   | gtggacagag | ctaggaaaat | attacctgat | tctccctcta | gccacacaaa | tcatgttacc | 660 |
|   | ttctggtcat | ctgaaggtcc | tctcttctnc | aagcggaaac | cctctcaacc | ctgcctcagt | 720 |
|   | cagtgccaca | gttttgaatc | tcctaactat | atgnnggctt | tctgcactct | taatttggga | 780 |
|   | agtgccactc | tttnttt    | ,          |            |            |            | 797 |
|   |            |            |            |            |            |            |     |

<210> 419

<211> 800

<212> DNA

<213> Homo sapiens

## <400> 419

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ttccaaaaaa gaagatgaat ttaaaagata aaagccatga aggtgttgct tgtgtccaga 120
aagaaaaatc agtagttaaa acctggttct gtgaatgcaa tcagcgattc ccaagtgaag 180
atgcagtaga aaagcatgtt ttctcagcaa acacaatggg ttataaatgt gtggtctgtg 240

gaaaggtatg tgatgattca ggggtcattc gtttacacat gagccggatt cacggaggg 300 cacatttaaa taactttett ttetggtgte ggacatgeaa aaaggagtta acaaggaaag 360 atactatcat ggcacatgtg actgaatttc ataatggaca cagatatttt tatgagatgg 420 atgaggtaga aggtgaaact ttgccatcat cctctacaac attggataat ttgactgcta 480 acaageette ateagetatt actgttattg ateatteece ggcaaatagt teteegaggg 540 gtaaatggca atgccggatt tgtgaagata tgtttgattc ccaggaatat gtaaaacagc 600 actgcatgtc tttggcaagc cacaagtttc atagatacag ctgtgctcac tgcagaaagc 660 cttttcataa gatagaaaca ttgtccgaca ttgccaagat gagcatgaca atgagataaa 720 gattaaatet tetgtggget ttgngatent atetttaatg nggaagaaca tttetgagte 780 800 attatgagga gcaccacagc

<210> 420

⟨211⟩ 823

<212> DNA

<213> Homo sapiens

#### <400> 420

gttcacttaa aattcataga gagacatgta gaaatacata ctagataatg aaaggatcca 60 aacagtgaag aagcagtccc tttatatttt tgaatttttt ttcaagagta aagtgtgtta 120 tgatagicat citgatitgi tigaaatgat gittacaaat gctattaaaa tiataaatcc 180 tacattttac ttgtgaattt tttggtctac ctttctagtt gtaaaatata aaaatcctaa 240 aagatcatat tgattaactt cttggtggaa tcacttatct tgttttgatg ataggagcag 300 tatagcatca agtictagag gaatigggag ccatigcaaa icigagggic aggaggaatc 360 tttcgtccca cagagctcag tgcaaccacc agaaggagac agtgaaacaa aagctcctga 420 agaatcatca gaggatgtga caaaatatca ggaaggagta tctgcagaaa acccagttga 480 gaaccatatc aatataacac aatcagataa gttcacagcc aagccattgg attccaactc 540 aggagaaaga aatgacctca atcttgatcg ctcttgtggg gttccagaag aatctgcttc 600 atctgaaaaa gccaaggaac cagaaacttc agatcagact agcactgaga gtgctaccaa 660 tgaaaataac accaateetg ageeteagtt eeaaacagaa geeaetggge etteagetea 720

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<210> 421

⟨211⟩ 832

<212> DNA

<213> Homo sapiens

#### <400> 421

tttttcggac ggctgcagca tcgcggtggg gatcgaaagc gggggcttct gggacgcagc totggagacg cggcotcgga ccagccattt cggtgtagaa gtggcagcac ggcagactgg 120 tcaaacaaat ggattttaca gaggcttacg cggacacgtg ctctacagtt ggacttgctg 180 ccagggaagg caatgttaaa gtcttaagga aactgctcaa aaagggccga agtgtcgatg 240 ttgctgataa caggggatgg atgccaattc atgaagcagc ttatcacaac tctgtagaat 300 gtttgcaaat gttaattaat gcagattcat ctgaaaacta cattaagatg aagacctttg 360 aaggtttetg tgetttgeat etegetgeaa gteaaggaea ttggaaaate gtaeagatte 420 ttttagaage tggggeagat eetaatgeaa etaetttaga agaaaegaea eeattgtttt 480 tagctgttga aaatggacag atagatgtgt taaggctgtt gcttcaacac ggagcaaatg 540 ttaatggate ceattetatg tgtggatgga acteettgea ceaggettet ttteaggaaa 600 atgctgagat cataaaattg cttcttagaa aaggagcaaa caaggaatgc caggatgact 660 ttggaatcac acctttattt gtggctgctc agtatggcaa gctagaaagc ttgagcatac 720 ttatttcatc gggtgcaaat gtcaattgnc aagccttggc caaagctaca cccttggtca 780 atggttgntc aaganggaca ccccaaaatg gtgtggagct tttgcttttc ca 832

<210> 422

**<211> 853** 

<212> DNA

<213> Homo sapiens

# <400> 422

| agaaacttct | ccaaaactac  | attagatatt  | tatatctcac   | atgtctttag   | 60  |
|------------|---|---|--|--|---|
| cctaagctgg | gtttgggtgg  | atcactctgg  | taatatgaga   | tgggccatgt   | 120   |
| gaagttagag | tttggccaat  | ttaggctaca  | tctggagggg   | gtgatctcat   | 180   |
| cttctgggaa | tggtgtacta  | gtgtggggat  | gtgcttgtgg   | taaatggaga   | 240   |
| actccaatgt | ggaagccatc  | tcaaagacgt  | atacaaaatt   | tactaatttc   | 300   |
| aagcaaatta | catgagtgag  | ctcagattcc  | aaggtcaagg   | tagtcaccct   | 360   |
| ggaggacact | gcaagataat  | atatcaaagg  | atgagggagt   | caagagtatt   | 420   |
| ctgaatagtt | taattaaata  | attaatattt  | aaacattaaa   | tagacttgag   | 480   |
| ccaaaggcct | aagcatgaga  | aatatgtttg  | atagatatta   | ttctggtctg   | 540   |
| gtgggaaaac | agaactaatt  | ccacctggat  | gaccttctgg   | aaactcattt   | 600   |
| ttaaattaaa | agaaaataat  | tccttccaac  | cccaatgggt   | ttaagtgtgt   | 660   |
| ttatgagctt | ggtaacaata  | aagtcatata  | aaagtattgg   | ntagcagcaa   | 720   |
| aggcgtatgg | ccttcttgng  | gttccaagaa  | aaccttggat   | gattttgata   | 780   |
| gttctggata | tttaaatcta  | cattaaaaaa  | taaatccata   | tttatccnat   | 840   |
| nca        |   | , •   |  |  | 853   |
|            | cctaagctgg gaagttagag cttctgggaa actccaatgt aagcaaatta ggaggacact ctgaatagtt ccaaaggcct gtgggaaaac ttaaattaaa | cctaagctgg gtttgggtgg gaagttagag tttggccaat cttctgggaa tggtgtacta actccaatgt ggaagccatc aagcaaatta catgagtgag ggaggacact gcaagataat ctgaatagtt taattaaata ccaaaggcct aagcatgaga gtgggaaaac agaactaatt ttaaattaaa agaaaataat ttatgagctt ggtaacaata aggcgtatgg ccttcttgng gttctggata tttaaatcta | cctaagctgg gtttgggtgg atcactctgg gaagttagag tttggccaat ttaggctaca cttctgggaa tggtgtacta gtgtggggat actccaatgt ggaagccatc tcaaagacgt aagcaaatta catgagtgag ctcagattcc ggaggacact gcaagataat atatcaaagg ctgaatagtt taattaaata attaatattt ccaaaggcct aagcatgaga aatatgtttg gtgggaaaac agaactaatt ccacctggat ttaaattaaa agaaaataat tccttccaac ttatgagctt ggtaacaata aagtcatata aggcgtatgg ccttcttgng gttccaagaa gttctggata tttaaatcta cattaaaaaa nca | cctaagctgg gtttgggtgg atcactctgg taatatgaga gaagttagag tttggccaat ttaggctaca tctggagggg cttctgggaa tggtgtacta gtgtggggat gtgcttgtgg actccaatgt ggaagccatc tcaaagacgt atacaaaatt aagcaaatta catgagtgag ctcagattcc aaggtcaagg ggaggacact gcaagataat atatcaaagg atgagggagt ctgaatagtt taattaaata attaatattt aaacattaaa ccaaaggcct aagcatgaga aatatgtttg atagatatta gtgggaaaac agaactaatt ccacctggat gaccttctgg ttaaattaaa | agaaacttct ccaaaactac attagatatt tatatctac atgtctttag cctaagctgg gtttgggtgg atcactctgg taatatgaga tgggccatgt gaagttagag tttggccaat ttaggctaca tctggagggg gtgatctcat cttctgggaa tggtgtacta gtgtggggat gtgcttgtgg taaatggaga actccaatgt ggaagccatc tcaaagacgt atacaaaatt tactaatttc aagcaaatta catgagtgag ctcagattcc aaggtcaagg tagtcaccct ggaggacact gcaagataat atatcaaagg atgagggagt caagagtatt ctgaatagtt taattaaata attaatattt aaacattaaa tagacttgag ccaaaggcct aagcatgaga aatatgtttg atagatatta ttctggtctg gtgggaaaac agaactaatt ccacctggat gaccttctgg aaactcattt ttaaattaaa agaaaataat tccttccaac cccaatgggt ttaagtggt ttatgagctt ggtaacaata aagtcatata aaagtattgg ntagcagcaa aggcgtatgg ccttcttgng gttccaagaa aaccttggat gattttgata gttctggata tttaaatcta cattaaaaaa taaatccata tttatccnat nca |

<210> 423

<211> 872

<212> DNA

<213> Homo sapiens

# <400> 423

| gatactcata | tagtagagat | ctagaccttg | ctaagaaaaa | acatgettée | ctgaggcaga | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| cggagtctga | tccagatgct | gatagaacca | ctttaaatca | tgcagatcat | tcatcaaaaa | 120 |
| tagtccagca | tcgattgtta | tctagacaag | aagaacttaa | ggaaagagca | agagttctgc | 180 |
| ttgagcaagc | aagaagagat | gcagccttaa | aggcggggaa | taagcacaat | accaacacag | 240 |
| ccaccccatt | ctgcaacagg | cagctaagtg | atcagcaaga | tctccggact | gaacgattac | 300 |
| aaaaaacaac | agaacgtttt | agaaatcctg | ttgtgttcag | caaagattct | acagtcagaa | 360 |

aaactcaact tcagtctttc agccaatata ttgagaatag accagagatg aaaaggcaga gatcaataca ggaagataca aagaaaggaa atgaggagaa ggcagcgata actgaaactc 480 agaggaagcc atcagaagat gaagtgctta ataaagggtt caaagacacc agtcagtatg 540 tagtaggaga attggcagca ctagagaatg agcaaaagca aattgacacc cgtgccgcgc 600 660 tggtggagaa gcgccttcgc tatctcatgg acacaggaag gaacacagaa gaagaagaag ctatgatgca ggaatggttt atgttagtta ataagaaaaa tgccttaata aggagaatga 720 780 atcagetete tettetggaa aaagaacatg atttagaacg aengtatgag etgetgaeee 840 gggaattgag gcatgctagc cattgaagac tggcagaaga ccgaggccan aagcgacgcg acagttntgc tgatgactgg tggncctggt ga 872

<210> 424

<211> 859

<212> DNA

<213> Homo sapiens

### <400> 424

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tttctaagaa ggaagattct tatccagata tgaaatctgg cttttgaata ataaaagctc 840 ttgcttanag gagaaggcc 859

**<210> 425** 

<211> 760

<212> DNA

<213> Homo sapiens

### <400> 425

gaaacagaaa cagaatgcat ggctgctcaa aaagagtatc tttttgtgct ttcttgaggg 60 agagggttgt ggaggggaaa ccctccaact cgggctggct aacagggatg cttccttatg 120 aaacgtgete acctaagaat accagtgaga ccateggeae tttetgtaat tggeageaat 180 agagetatta gaagaaacat gaaagagata gatggatetg aaatcaacat ttgtaacaaa 240 aggecteace atgtteecea geacaaatgt getaetgatt ageagetaaa atgtgageat 300 ccctactcaa attcaccctg ttctccccat cctgaaggtt ctgatattaa tgcataacat 360 tgtagcttat aatgctttta cttaacatta tcttattcat gcatcatcag agaatgatct 420 accaaaatgt atggagagaa agctaaaaat gtaaagtggc tgttctcaat cttagctaca tattagaaca acttggggag tttttaaatt ctgtgataac cacactgccc tcagaccaat ccgaattctg gggcttaaat ccaggtggag tgctagccac atgtagagca gctttctgct 600 ttcatatata tctgggctta ggcctcggtg agggttggga agggcctatg acctctgaag 660 ageetteaca ttacageeca ggaacagetg geecacagea ggagagatge agageetgan 720 ·760 gtgganggcc aagcctgggg aatanggggt gctttgaaaa

**<210> 426** 

<211> .877

<212> DNA

<213> Homo sapiens

<400> 426

actictizetg tactacaaag agatagaate aaactgettt titticgacat actggittit 60 ctttctgttt ttcttctct tcttctattt cttgtggata ttatggctaa taacacaaca 120 agtttaggga gtccatggcc agaaaacttt tgggaggacc ttatcatgtc cttcactgta 180 tccatggcaa tcgggctggt acttggagga tttatttggg ctgtgttcat ttgtctgtct 240 caccttccgg cgacaagctt ccctggaaca agcaaattcc tttccaagaa aatcaagttt 300 cagagettet aetttecate cetttetgea atgtecacca etteetgtgg aaactgagag 360 teagetggtg acteteett etteeaatat eteteeaec ateageaett eccaeagtet 420 .480gageegteet gactactggt ceagtaacag tettegagtg ggeettteaa caeegeeeee acctgcctat gagcccatca tcaaggcatt cccagattcc tgagtagggt ggcttttggt 540 ttttgtttct ttcttgtctt gtcttttatt gaaaggaaat caaaaatagg ctaaacagaa 600 ttttgagggc atggcccaaa taactcatga gttccaagtt gaaacatggt tgtgcaagtt 660 ggacattaca atgtttttag tagagatgaa gtgtcactat gttaccaagg ctggtctcaa 720 actectaaac teagatgate etnetgeete ggeetteeaa agtgttggaa attageetgg 780 840 ccaatcttgg attttaatgg gaaatgtggg ccccaaaatg accgaacata ggacattcta 877 aagttoottg gattggatca ttataagaaa gngnggg

<210> 427

**<211> 866** 

<212> DNA

<213> Homo sapiens

#### <400> 427

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gtacttitga ttactaatga cttctattac cttcttcccc attgtgtaca gatgggagaa 480 tcctcagcac aagtgtctac tactattgga tggacagcgg cagatgttca cagcgcgtca 540 tgattaatta gtttaaattg caaggttcta tctgtgaggt agctcaggta gatttaaggg 600 cggtagacat gaactgaagt cacgtttgcg cagcggctct aggtatacac ttcacattgn 660 ttctttgcag gtcgcacagc attttaatct gcgcccgcaa tgcacaatgc gcgcatgctt 720 gnctgccagt ggaagcttca tgaacaaaag atagnaatta tgccaataaa tggtgaaaga 780. 840 cttttggata tttatccaat tatttataaa tataanggct tggaaagaat ggccatgntg aaatttgaac aaattggaag tttttt 866

<210> 428

<211> 765 '

<212> DNA

<213> Homo sapiens

## <400> 428

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<210> 429<br/><211> 848

<212> DNA

<213> Homo sapiens

# <400> 429

| aaagcaaaaa aattagtaga aatggaaaga gaacatgaaa aatcacttag tgaaatta | g <b>a</b> 60 |
|---|---------------|
| cagttaaaga gagaacttga gaatgttaag gccaagcttg ctcagcacgt caaaccag | ag 120        |
| gaacatgaac aggttaagag cagattagaa cagaaatcag gagaacttgg gaagaaga | tc 180        |
| actgagttaa cattgaaaaa tcagacacta caaaaggaaa ttgaaaaagt ttatttgg | at 240        |
| aataagetee teaaggagea ageacataae ttaacaattg aaatgaaaaa teattatg | tt 300        |
| cctttaaaag taagtgaaga catgaaaaag tcacatgatg caattattga tgatctta | at 360        |
| agaaagcttt tagatgtaac acaaaaatat acagaaaaga agttggaaat ggagaaat | tg 420        |
| ctactggaaa atgacagctt aagtaaggat gtaagccgcc tagaaactgt gtttgtac | ct 480        |
| cctgagaaac atgaaaaaga gataatagct ctgaaatcca atattgttga acttaaga | aa 540        |
| cagctgtctg aacttaagaa aaaatgtggt gaagaccagg agaaaataca cgctctca | ca 600        |
| tctgaaaaca ctaacttgaa gaagatgatg agtaatcagt atgtgccagt taaaaccc | at 660        |
| gaagaggtta aaatgacact gaatgacacg ttagccaaaa ctacagagaa ttattaga | tg 720        |
| tgaagaaaaa atttgaggat ntaaatcagg aatttgtaaa aattaaagat tagaatga | aa 780        |
| ttttaaaaag aacctggaaa acactcagaa accaattaaa actgagtnca ttancctg | gc 840        |
| anacccca  | 848           |

<2105 430 €

<211> 832

<212> DNA

<213> Homo sapiens

<400>.430

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cggtctaggc agcggaggca gccgcgaccc caggaaaccg aggaaatgaa gacgcgaagg actaccegce tteageagea geacteagag eageeteege tacageegte teetgttatg accaggagag ggctgcggga ctctcattcc tctgaagagg ttgaagcatc ttcccaaact gatttaagcc aaacgatctc aaagaaaact gtcaggagca tacaagaggc tccagtgagt 300 gaagatettg taateaggtt acgtegacce cetetaagat acceaagata tgaagceace 360 agtgtccaac agaaggtcaa tttctctgaa gaaggagaaa ctgaagaaga tgatcaagac 420 ageteteaca geagtgteae taetgttaag geeagateea gggattetga tgaatetgga 480 gataaaacca ccagatcatc tagtcaatat atagaatcat tttggcagtc atcacaaagt 540 600 caaaacttca cagctcatga taagcaacct tcagtgctaa gctcaggata tcaaaaaact ccccaggaat gggccccaca aactgcaaga ataaggacca ggatgcaaaa tgacagcatt 660 720 ctgaaatcag agcttggaaa ccagtcacca tcaaccttca gcccgacaag tgactggaca 780 accccaaaat gcatcttttg tcaagaggaa cccggtggtg gctacttnct ctggatagct gctcttggct tttgggaagt ttttgggttc tttaagnact tcctggaggt ng 832

<210> 431

<211> 603

<212> DNA

<213> Homo sapiens

### <400> 431

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| •          | •          | •          |            |            |             |     |
|------------|------------|------------|------------|------------|-------------|-----|
| cttcattgct | actcaaagtg | tgctccacaa | cccancacag | ncacatcatc | gganagcttg  | 600 |
| cta        |            |            |            |            |             | 603 |
| <210> 432  |            |            |            |            |             | •   |
| <211> 880  | •          |            |            |            |             |     |
| <212> DNA  |            |            |            |            |             | :   |
| <213> Homo | sapiens    |            |            |            |             |     |
| <400> 432  |            |            |            |            |             |     |
| gttacccagt | gcccaagggc | agtcttgata | ttatcattct | catatttgtt | ctttcagcaa  | 60  |
| ttgttccaga | caagatgcag | aaggctatca | acaggctgag | caggcttctg | aaacctggcg  | 120 |
| ggatgatgct | tctgcgagat | tacggccgct | atgacatggc | tcagcttcgg | tttaaaaaaag | 180 |
|            |            |            | •          | • •        |             |     |
| gtcagtgtct | atctggaaat | ttctacgtga | gaggtgatgg | aaccagagtt | tacttcttca  | 240 |

tggatcgccg actgcaggtg aaccgaggaa agcaactgac aatgtaccgg gtttggattc

agtgcaaata ctgcaagccc cttctgtcca gcaccagctg agaggcacct gctgccaaca

cgatgcaagc ccattgtgtt tccgggcttt ttttaaaaaa aaaattgtag cactgggcgt

ggtgcatgcc tgtaatccca gccactcagg aggctgaggc ggggaggatc cattgagccc

agcagtccaa cctgggcaaa atagtgagag accctgtatc tgaaagtaat aataaaaata

aaaaatataa atgaggtctc gttgatgttg gacaattcaa gaattcagac ttgaacctta

aacctaggaa aagttacttt gtatcaggat tctaacaatt atgcttcata tttgtgaagt

cctttaaaac ataattttct caagttcttt ctttgagatc tcaatctgnc ttaacatttt

gnaactaata actgaaattt tattcaaagg aattgnaaac cttaaacccc ccaatttatt

tccatgtgaa aaagtgttac atatgacaag tgtttttgn

<210> 433

<211> 840

<212> DNA

<213> Homo sapiens

360

420

480

540

600

660

720

780

840

880

### <400> 433

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<210> 434

<211> 912

<212> DNA

<213> Homo sapiens

### <400> 434

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catgacctaa ttttgaaaat ttaaaatagt gtaaggcccc taggcttaat tttacagggg 420 aaagattaaa aggacacaag caaacatata ttctctctct gtgctgtggg acactggtaa 480 ttttttgact taaaatattt gatacttaaa atgccaaact tctacatttc tgcagtaaca 540 aggeagttat catattgaat accatttett teteteeagt aagtaaatat tageacatga 600 actgaaaata ttaagtgatt ataaaaaagt ccaaataaat tcattaaaat ttagcttggc 660 720 accaatttac aagccaaagg aaatggcatc aaatattttg acacccctgg cttcccaagg 780 gggtattgga ttcaatgcct ttttggctca naaatctang gtttcttcca cttcanggaa 840 aaaggagga gaaatgtacc cccatacctt tggggaaaaa ccaagttttc cgatgggccc 900 912 cagetttttg aa

⟨210⟩ 435

⟨211⟩ 791

<212> DNA

<213> Homo sapiens

### <400> 435

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| ggaaggaagc ccaccccac  | acctgcatct | gnctgggttc | aaccaggtaa | agggacttac                            | 780                                     |
|-----------------------|------------|------------|------------|---------------------------------------|---|
| tgggatcgng g          |            |            | •          |                                       | 791                                     |
|                       |            |            |            |                                       |   |
| <210> 436             |            |            | •          | · · · · · · · · · · · · · · · · · · · | . •                                     |
| <211> 751             | -          |            |            |                                       |   |
| <212> DNA             |            | •          | •          |                                       |   |
| <213> Homo sapiens    |            |            |            |                                       | · .                                     |
|                       |            |            |            |                                       | * · · · · · · · · · · · · · · · · · · · |
| <400> 436             | •          |            |            |                                       |   |
| aggtgggggc cggggcggga | tggctgcagc | ggcggccggg | gccgggagcg | ggccctgggc                            | 60                                      |
| ggcccaggag aagnagntcc | cgccggcgct | gctgagtttc | ttcatctaca | acccgcgctt                            | 120                                     |
| cgggccgcgc gaaggacagg | aggaaaataa | gattttattt | tatcatccaa | atgaggtaga                            | 180                                     |
| aaagaatgag aagattagaa | atgtcggatt | gtgtgaagct | attgtacagt | ttacaaggac                            | 240                                     |
| atttagccca tcaaaacctg | caaaatcttt | acatacacag | aagaacagac | agttcttcaa                            | 300                                     |
| tgaaccagaa gaaaatttct | ggatggtcat | ggtatttaca | cacacagtgt | atctttctga                            | 360                                     |
| aattgtatgg tgaagttatg | ggtgatcttt | actgttcana | atttaggaaa | gttctctggc                            | 420                                     |
| tgttgcatcc aagtaaaatt | aaaataaaat | tggttgcaat | tttaaaatca | agttcttcct                            | 480                                     |
| atttgcttta ttcattcttg | gggctgtttt | aagaagttgt | gtttctggtg | ctgtagcatg                            | 540                                     |
| ttcaaagttt ttaaattaag | gcaagataaa | catggnctaa | tgaattcatt | gtataatttc                            | 600                                     |
| aagtttatca aactttgtag | gttgttcgga | atcctataat | tgaaaaacag | agttcanatg                            | 660                                     |

gaaaaccagt tattgaatat caagaggagg agttgtttgg taatggtgtc attggttgtt 720

<210> 437

<211> 780

<212> DNA

<213≻ Homo sapiens

taatnattta tttttttaaa tgnattgctg a

<400> 437

751

cttccttcta gcagaaatgg cggctgcggc ggctcgagtg gtgttgtcat ccgcggcgcg 60 gcggcggctc tggggtttca gcgagagtct tctaatccga ggcgctgcgg gacggtcatt 120 atattttgga gagaacagat taagaagtac acaggctgct acccaagttg ttctgaatgt 180 tcctgaaaca agagtaacat gtttagaaag tggactcaga gtagcttcgg aagactctgg 240 gctctcaaca tgcacagttg gactctggat tgatgctgga agtagatacg aaaatgagaa 300 gaacaatgga acagcacact ttctggagca tatggctttc aagggcacca agaagagatc 360 ccagttagat ctggaacttg agattgaaaa tatgggtgct catctcaatg cctatacctc 420 cagagagcag actgtatact atgccaaagc attctctaaa gacttgccaa gagctgtaga 480 540 aattettget gatataatae aaaacagcae attgggagaa geagagattg aacgtgageg tggagtaatc cttagagaga tgcaggaagt tgaaaccaat ttacaagaag ttgtttttga 600 ttatetteat geeacagett ateaaaatae tgeacttgga eggacaattt tgggaceaae 660 tgaaaatatc aaatctataa gtcgtaagga cttantggat tatataacca cacattataa ∵720 ggggccaaga atagtgcttg cttgctgctg gangtgttnc catgatgaat tgcttgctta 780

<210> 438

⟨211⟩ 872

<212> DNA

<213> Homo sapiens

### <400> 438

gataaatcta tgctagaggg tataaaagaa acacaaaaat agaggtatgc catgtataag 60 acccaacata ataaatagtt ctaccaaatt aatttataaa ttcaaagcaa tttcatataa 120 ccacagtaaa gctttttaaa tggatgtaat aacctgatta taacattaat ctgaaagtca 180 240 tcaggcataa agcaattttg attacatctc aaaacaatcc atggagttag ggtaaatgtg 300 ctgttcacac aggaataatc acaggtatag aaccgagaac ctaggaacag agcaatgtat 360 atatatatgt atttaaaaaa tggcatcaca agtcagtaga gaagggtttg aactattcag taaatgatgt tgaggttatt tactactttt tcttatttca tatcatggat gaaaaaaatc 420 480 aagatgaatt aaacatggaa attaaaaata actagaagaa aatactggaa aaaaattgta 540 ataaatgtgt aagaaaggca ttcccaacca agacacaaaa cccagtagcc atgaaaaaaa

agatagattt gactacattt ttaaaaagta aaacctttca ctttttacaa aactttgata 600 aaattagatt tcataaataa aggagtggga aaatacatgt aatagaacag aagatttaag 660 ataatataaa gagcacctac aaacacaaaa attggacaaa ggctataaaa atatttata 720 aataagaaat acagactata aacataaact ttcaacctcg tagcaatcag gaaaattaaa 780 ggtaaaatga gatactattt ttcaatactt ggaaatggca gattttaaag attggtgata 840 gtgccggaga tatgtgagga aagagtntct cc 872

**<210> 439** 

**<211> 863** .

<212> DNA

<213> Homo sapiens

#### <400> 439

cataattttc tatctatggt accettggct tctgcctggc ttctgaggct tagggaaggg . 60 aggaagggac ctacaaagag ccagggtaca cctgcctctt gtgctgaggg cacgtgccag 120 cttctctgcc agtaagcctt ttgctagcta acatttccca ccctcccaag gcccctaacc 180 tgccctcccc tctccactat gttagtatat ctacctctgt ttctgactct gaggaagggt 240 300. caggecacae ggagggaaca gtagtgggta ceagecteec etetgetgte cagtecacea catcaatctc ttcctcttca gagctggcag gaagtgagcc tagtagttca gagtgaccag 360 atacctcctt gcctgccttg ggagaagggt ataataactc atctgtagtc aaggagactt. 420 ccagcccagt ctccacccag tttgagcagg gaggtgagag gtccccataa gacctctggg 480 gagtatcaag ggagctgaca tggagaagtt tgtcttcctg accatccagt ggctgggagc 540 tggtaatttc aaggtctggt gtccaacggc ctcctactga aagcacttca ctcacctcag 600 agggcatgac aagggggcta aggagctcag ttggccctct gttctcacca gcaggttcct 660 tttccaattc tgtgagctcc ctgggccaga gttccatgtc tggtagacac cattcttccc 720 780 ttcaatccag tctttcctgg ttctgcagat ggtaggtagg cgttctgcaa cccttaaccc cctggaactn ttcaaaagac ccttataggg ngggttcaat ggtctgaacc cccagaaccn 840 863 tgaaagtcca ggatcttctt tca

<210> 440 <211> 640 <212> DNA

<213> Homo sapiens

# <400> 440

| atccatggca | cggagcggcg | gcggcggcgg | cagcaggagc | ccggcgcgat | ccgctaggtc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ccagcccagc | gcccagcgag | caggcgacgc | ggaggggccg | ggcctccagt | gtcccgaggg | 120 |
| ccgggcgctg | agactccggc | cgcgcagctg | ggagctgccc | gcgctgcgct | gacagccgcg | 180 |
| ccgacgtcct | cccgccggg  | gcgctcgcag | gacatgcccc | cggggcgcgg | cggcggggac | 240 |
| cccggggctc | gcctccgccc | agggccccc  | tccacgccct | cgggagcccc | gggccccgc  | 300 |
| tgagcactcc | tcccgcacgc | ctgggtccct | ccggccggng | cgcagcccgg | cccagcgct  | 360 |
| gtgggtcccc | gcggggcgat | gggttgatgg | gcgccggggg | acgcaggatg | cggggggcgc | 420 |
| ccgngcgcct | gctgctgccg | ctgctgccgt | ggctcctgct | gctcctggcg | cccgaggctc | 480 |
| ggggcgcgcc | cggctgcccg | ctatccatcc | gcagctgcaa | gtgctcgggg | gagcggccca | 540 |
| aggggctgag | cggcggcgtc | cctggcccgg | nttggcggaa | ggtggtgtgc | agcggngggg | 600 |
| acctcccgga | gcctcccgaa | cccggncttc | tgcctaacgg |            |            | 640 |

<210> 441

<211> 823

<212> DNA

<213> Homo sapiens

# <400> 441

| cctcagtgta g | gagtgatct | gaagcaggac | aagctcagcc | tgcagctgcc | gtgggctttg | 60  |
|--------------|-----------|------------|------------|------------|------------|-----|
| tgtggactgg a | cgcagagct | tgggagacgg | gggagggcta | ttactccaat | tcactgtcaa | 120 |
| tggaattaca g | ctatagcgg | cagtgtatat | aggattgctt | tttctcgtct | tcctgggttc | 180 |
| tgaagtaacg g | aagctacct | tgtataaaga | cctcaacact | gctgaccatg | atcagcgcag | 240 |
| cctggagcat c | ttcctcatc | gggactaaaa | ttgggctgtt | ccttcaagta | gcacctctat | 300 |

cagttatggc taaatcctgt ccatctgtgt gtcgctgcga tgcgggtttc atttactgta 360 atgategttt tetgacatee attecaacag gaataccaga ggatgetaca actetetace 420 ttcagaacaa ccaaataaat aatgctggga ttccttcaga tttgaaaaac ttgctgaaag 480 tagaaagaat atacctatac cacaacagtt tagatgaatt tcctaccaac ctcccaaagt 540 atgtaaaaga gttacatttg caagaaaata acataaggac tatcacttat gattcacttt 600 caaaaattcc ctatctggaa gaattacatt tagatgacaa ctctgtctct gcagttagca 660 tagaagaggg agcattccga gacagcaact atcttcgact gcttttcctg tcccgtaatc 720 accttagcac aattccctgg ggtttgncca ggactattga agactacgct tggatgataa 780 823 tegeatatne cetattteat caccatetnt teaaggetea eta

<210> 442

<211> 852

<212> DNA

<213> Homo sapiens

# <400> 442

cattccaaat ggtcaacatt ggctcaacac tgagtgagaa gaaaaggcag aagaaaacca aagggcagaa ctgatagctt caggtcagtc tgagtgcaga atgaaagact cagctgtttt tattatttcc agettgttga eettgetata eatteacaga agtttgaact tttctagata 180 atcagcaaaa caaagcaaga tgagaagaga gtttgaaggg tttgtttagg ctcctctttg 240 tagacttaga gcagcagttt caaaattcag ttccagcagc atcaggtcac ctgggaacgt 300 gttagaaatg cagattettg tgccccatte aggcctactg aaccagaaac tggagagtgg 360 ggcccaggaa tctgtgggct aattttttt taatgttgta gttatatata taaaacatag 420 cattttctat tttaactgta gaattcagtg acattcacag tgttttacaa ccataaccac 480 tatetgttte caaaactttt teateacee aaacagaace tttgtaatta ttaagcaata 540 attecteact coetecaate eccageceea gataacetet aateteette tgtetetatg 600 660 aatttgtcta ttctagatgt tatgtacaag tggaattatg tggccttttt agtctggttt 720 attttgccta gcagaatgtt ttcaagggtc ctacatgttt tagtatatag caatacttcg atacttttta tggctgaata atattccatt gnatggctat accatggttt ggttatccat 780

tcatctggtg atggatgctt ggggtggttt caccctttgg ctattgggga ataatgctga 840 aatgaacact gc 852

<210> 443

⟨211⟩ 834

<212> DNA.

<213> Homo sapiens

#### <400> 443

agggcaatac agtttttgta aaattttaca aaaattggac tccccccatt gaaacactgt actttgaaag aaacttcaaa ttcagcatat tttttaaaaa tctggatgat gactcgtttt. 120 ctttctttca aaccttttaa ttncgacaac atttagctta aggcaaattt tatctttgtt 180 atagetattt cagaacaget tttaaaatge aatttaaaaa atggeattta geaageaatt 240 gccttttcaa ccttaaccat agagcctctt ccatggattc cattatattt tattaacata 300 agttaaaata ggagtgttct gggtttcaca aggattaaag ttcctatcta atgtgcatgt 360 aactaaacge acgittacgi acataatage tatiggicac agittgiaig aiggictitc 420 agccagaaaa cagggctgca gttcttacag tagtccttga ataatgacgt tacattcaac 480 gtcttttcat tattgggtta tgagaaaaaa atttgattcc aggtgggtgc ccctgtctgt 540 gtggaatttg cacattetee teaagtetgt ttgggtttte tetggataet acagttttet 600 cccacatece aaacacaege ategeatgtt aggtttateg gettgtttaa atggteetae 660 720 tgttagtgca ccctgcgaag gggatggcat cctggccagg gttgggncct cctttggccc 780 tgagettttg ggatgggete tggeaaceet taagnetgae tgggaatang eagt 834

<210> 444

<211> 634

<212> DNA

<213> Homo sapiens

### <400> 444

gttaggattc ctggttttaa actagagaaa agaacatgta tcaagaaaat cataaggaag 60 agaaaacaca tttacagtac tgtactgtat ttattggtac catacattta tgttgctgtt 120 tacaagatga agcatctgtc tgaaatggcc agcagctaca gctgtaccta tctactgtac 180 atatcaagca agtcacttta ttcttataat gtctatgact tctctctttg aaagcgcttc 240 catcatcact gttggcactt catatgggtc tcatggtgtt aaggtttacg gcattgcact 300 agacacaatg aaaactacac aagagggccg ggcacggtgg ctcacgcctg taatcccagc 360 420 actttgggag gccgaggcgg gcggatcatg aggtcaggag attgagacca tcctggctaa cacagtgaaa ccctgtctct attaaaaata aaaaaattag ccaggcatgg tggcacgtgc 480 ctgtaatccc agctaatcgg gaggctgagg caggagaatc gctttttccc agaaggcgta 540 ggttgcagtg agccgagatc gtgccactgc actccagcct ggatgataga gggagactct 600 634 gtcgcaaaaa aaaaagaana gaanaagaan agaa

<210> 445

<211> 852

<212> DNA

<213> Homo sapiens

### <400> 445

gatectittg gitetgitee titeatitet eatteaggea agitaeacat giaacateat 60 cactgtcaca aataaaacac acaagaacaa cagcaaaatc ttataaagtg gaagtaagac 120 tctgatgtta gttagctaca gaaagtagaa aatattttaa cctttagcca tcctactctt 180 cttaatgatg ttctttgcat tgagttatta ttcagttgta tctttgccaa catagaaaaa 240 tgctgattta cacaatagaa acataactgc ttcttttcat ctttattatt ggatactgtt 300 gaaaaaaata tttaaagata tttttatact tggcttttgc ttaaaaattt gatattttcc 360 tagtttgtac atgctctctt gtagatgcat tttaaaagta ttaatagttt tgtatttgtc 420 480 acaatcactt tgttttactc ttgtcttctt atatccctct tttgatttca attcagaatt caaatattga tgtttttcac tgttaaaaat tttcagtaat aatttcaaat tacccagtta 540 600 acacttggaa gatactagga tggaatagga tcgtgcattg gcataaatga attttcatgt

atgtatggtt atagtggaaa aaaagagttt taatcttggc aaagggaaat atgttagaag 660 aagttatgct ttattagaag gtaaaagttc gatatattca tggtaactgt cggccatgtt 720 cttcagttct ggtccttttg gttctcactc aggcaagtta catatgtaac accatttgaa 780 aactacngaa ttaccaccaa aggaaaaact tacaaatgta aagnccaaag aagaattgag 840 ggttaaggat tc

<210> 446

〈211〉 853,

<212> DNA

<213> Homo sapiens

### <400> 446

gaagcacate tggacagetg tgeggeetee ttgegggeeg acgteageeg ageaegteee 60 ccacgtcctc tccttctcgc cacttattat ttattcgttt tcccaaagaa gcgactaggg 120 acceaagttt aaaaatteet eeceecacte aatgegagae gtggeeagat eecateeaac acacggttta attttcatgg ggctctggga tcaaaagaac agaaacagca acaacaaaag 240 cccagccgct gtctgatttt aagctggcaa agtgggaaaa ataaagtgtt gagtaaacag accaagttgg atcatgggga atttcagagg tcatgccctc cctggaacct tcttttttat 360 tattggtctt tggtggtgta caaagagtat tctgaagtat atctgcaaaa agcaaaagcg 420 aacctgctat cttggttcca aaacattatt ctatcgattg gaaattttgg agggaattac 480 aatagttggc atggctttaa ctggcatggc tggggagcag tttattcctg gagggcccca 540 tctgatgtta tatgactata aacaaggtca ctggaatcaa ctcctgggct ggcatcattt 600 caccatgtat ttcttctttg ggctgttggg tgtggcagat atcttatgtt tcaccatcag 660 720 ttcacttnct gngtccttaa ccaagttaat ggtgtcaaat gccttatttg tggaggcctt tatettetae aaccacacte atggeegga aatgettgga catetttgng caccaactge 7.80 ttgggtttgg gccgctttct gacaggnctt ggtggctttc taaagttcct tggtcggaca 840 853 atggactttt gga

<210> 447

<211> 851

<212> DNA

<213> Homo sapiens

<400> 447

| ggtaatcctt | gaaatattta | aattataggt | cacatttgaa | attctgctta | gccgtttgta | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tgtaacttgg | taagaactaa | atgaattacc | gcattttact | caggttgttt | tcttgaggta | 120 |
| ataacattat | agattttgta | aaaagagaaa | aaagtattag | aattatctta | acattaggct | 180 |
| tccctaagta | ctctttctga | gttaaccaat | tgctttttaa | attatagctt | tatcagctac | 240 |
| ccctctaaaa | atcatgcttc | agtagatttt | tttatagggt | gtacagttct | atactttgaa | 300 |
| aagctcctgg | aataattatg | atattgcaaa | cagattttat | cataacactt | ttcattagtt | 360 |
| ttgccatatg | cacgtccttt | gttttatcct | atgacatgtt | tcagaattct | tttattgagt | 420 |
| tctttgtgaa | attttcctta | aaactttcct | atgcagatga | tcacaaatca | tatttgagtt | 480 |
| taaatacaag | tttgtttgtt | tgtttgttta | gagacggggt | cttgctgtgc | tgcccaggct | 540 |
| agtcttgaac | tccggggctc | aagcaatcct | cccacctcag | ccttccaaag | tgttgagatt | 600 |
| acaggcatga | gccaccacac | cctagcctaa | ctacaagtat | ttttgacagg | tgattttgaa | 660 |
| attttggggg | agctaatgca | agtaaactac | tttacttggt | gacatttgac | actctaaatt | 720 |
| ttaactggca | aatactttag | atatggacca | agaagatgca | ttaatttgct | ttgaagaaca | 780 |
| cattcgggct | ttanaaaagg | aggaagaaga | agaaaacccg | aagagttgct | gagagaaagg | 840 |
| agacnaccgc | n          |            |            |            |            | 851 |

<210> 448

<211> 687

<212> DNA

<213> Homo sapiens

<400> 448

acttgctttt tctcccgctt tgtaattgta ggagaaaacc aaagaactag cagagaagca 60 ggcgcaactg agcccatctc gctggccagc tgcgccatgg ctgatctggt tccagacttg 120

cageceatte tittetggat gietaactee ategagetee igtaetitat eeageagaaa 180 tgcccactct acatgcagag catggaggag cagctggaca tcacaggctc gaaggaatcg 240 ctgttctcct gcacgctgac ggccagcgag gaggccatgg cggtgctgga ggaggtggtg 300 ctgtacgcct tccagcagtg cgtctactat gtctccaagt ccctgtacat ctgcctcccg 360 gcactectgg agtgcccgcc attccagacg gagcgccgtg agagctggtc ctcggccccc 420 gaactgcccg aggagctgcg ccgcgtggtg tctgtgtacc aggcagccct ggacctcctg 480 540 eggeagetge aggtgeacce egaggtggee tegeagatge tegeetacet ettettette teegggacae tgetteteaa ceageteete gaeaggggee cetecetgag etgetteaet 600 660 ggcccagagg tgtccaggcc tgcgccgcct gcagcagctn ctggagtgga tgcngagcgc 687 cngcttcggg gcggctggag agcactt

<210> 449

<211> 874

<212> DNA

<213> Homo sapiens

#### **<400> 449**

ccaatatgag gaggaagact ccgtaaatcc aacaaacagg agaattagca ccaaaagaac ttaagatett aacagaatgg tttcaaagaa aatgtagtat atgaagtcaa aagetcaatg gacttgctaa atagcaaatt agttaaaatt caatgaataa gttaaaaaca gcttaagaaa 180 240 agaattageg tttgaggetg ceatgageet caaacateea geettttate tetetgtage ataaagagat aaaaaaagta gaaaaaatta taggaaggtt aaatattgga ggactgaatg 300 360 agaaagtccc acatacatct cataaggaat ctagaacaag agagaaaata agaaaactaa tttcaaaatg aaaatagatg agaattttcc agaaattcaa tttcattcct caaattaaag 420 aagcacaaca catccccagc aagttaaata aaaataaatc cacagacatc tccagtgaaa 480 540 ctcaatacca aattcaaaga tacaatctta aaagaaccaa agattaccta gtatgaatgc 600 agactggcat catgtttttt gcaacatcag gggccagatg acaatggaat aaagtaatat 660 ctttgaagta atgagaaaaa atatcaatct agaattctat acccacctta gctattttta 720 agagtaaggg taaaataaaa tttcactctt gcagaaagga cacccaactc tagagttaga

aaaccggtaa cccaaaaatt aaggtgggac tcaaaggact aaaaatatgg ttggtaaaat 780 cttaaatcag caatggactg cntaaaacca ccnttaatag gttaacctta aggaagttgg 840 ttaaggataa anggtaaaaa tactaggcca ataa 874

<210> 450

<211> .746

<212> DNA

<213> Homo sapiens

#### <400> 450

acagotaggg ctgotcagta actgococaa coactacoao gtococaagt goaacgggac 60 ccacggaact acaggtgtgg ggcagggtga gcgtggaaga agggacgcgg atgggggtgc 120 gctttgcaga cgatctggag actgctgtgt gttgagggaa gatacgaagt cgcgggagca 180 gttggggact caatgtgtgg gcaacaaggg tcctgctgag ctcaggagct gcacggaatg 240 gtggcagtca ccttgccagt gcagcaggca tggatcagac tgcaagctag gggcacgagg 300 catcagttgg gaagaggga cgcacagcta ggcttgaggc ctcttcatcg ggatgtcccc 360 aggececcea geceaggeee ageataaagg eegtgttggg gggeeeect gacceaaggg 420 480 gggcttcatg cgccacgtgc aggcggagcc gtctccatcc tcagagccgg aggctggccc ttcacagcct ccagtcaggc agggggccct ccagggtggc ctgctcatgg gctacagccc 540 atcagggggg gcgacatccc 'ccggggtcta ccaggtatcc atcttttccc ctncggctgg 600 tacctctgag cctcataggg ccctgaaacg acaagcccca tccacttgag ggttcccgg gagettaaaa aaageeettg ggettggggg geeanaanaa gggaettaee eeeettggaa 720 746 gaaaccentt ttacttgggg gggctt

<210> 451

<211> 787

<212> DNA

<213> Homo sapiens

# **<400> 451**

| aggagcttgc | agtagcgggc | ggcagagctg | gagtgaaggg | agctagtgtt | taggtagcag | 60    |
|------------|------------|------------|------------|------------|------------|-------|
| tcaccattat | gctcaaagcg | gtgatcctga | ttggaggccc | tcaaaaggga | actcgcttca | 120   |
| gacctttgtc | ttttgaggtg | cccaaaccat | tgtttcctgt | ggcaggggtc | cctatgatcc | 180   |
| aacaccatat | tgaagcctgt | gcccaggtcc | ctggaatgca | ggagattctg | ctcattggct | 240   |
| tctaccaacc | tgatgagccc | ctcacccagt | tcctagaagc | cgcccagcag | gagtttaacc | 300   |
| ttccagtcag | gtacctgcag | gaatttgccc | ccctaggcac | agggggtggt | ctttaccatt | 360   |
| ttcgagacca | gatcctggct | gggagccccg | aggcattctt | cgtgctcaat | gctgatgtct | 420   |
| actccgactt | ccccttgagt | gctatgttgg | aagcccaccg | acgccagcgt | caccetttet | 480   |
| tactccttgg | cactacggct | aacaggacgc | aatccctcaa | ctacggctgc | atcgttgaga | 540   |
| atccacagac | acacgaggta | ttgcactatg | tggagaaacc | cagcacattt | atcagtgaca | . 600 |
| tcatcaactg | cggcatctac | ctcttttctc | ctgaagcctt | gaagcctctt | cgggatgtct | 660   |
| tccagcgtaa | tcagcaggat | gggcaattgg | aggactcacc | agcttgtggc | caggggcang | 720   |
| taccatccgc | tagacaggat | gtgtttcagc | ctgcaggcan | ggncagatta | cgtgcatcta | 780   |
| ctgatgg    |            |            |            | •,         |            | 787   |

<210> 452

<211> 784

<212> DNA

<213> Homo sapiens

# **<400> 452**

| atttatttcc | tgcttacaag | gcagtcttca | gcatgtgtat | gtccatgtgg  | tcattcaggg | 60  |
|------------|------------|------------|------------|-------------|------------|-----|
| atccaggctc | cttgtgtttt | ctggctccac | ctcaccctag | ttcctaatca  | tcatccatat | 120 |
| ccacctgatg | gaatagaaaa | tagcgtgagg | tgtgttccca | ggaggctttg  | catgggttag | 180 |
| acctggaagg | caaacacatc | acgtctgctt | atgttccatc | tggaaaaaaca | tttgagttgc | 240 |
| cacagcaaat | tgctagtgag | aatgagagat | ggagttccct | gtgtctccaa  | gaagggtatg | 300 |
| actttggcag | agcagctctt | ctgttccctg | acttctcttt | ctcctgccag  | aacccagcac | 360 |
| cgagagggac | catcagagga | tgttccatga | gaacttggtg | agggttgtgg  | agaggttggc | 420 |

tggtgcttct ccgtcttcat acagatgtcc agacaggga ccagaagtct caggtctgag 480 ctctacctgg aagcccctca cgtctgtagc catcaaacct ccagataaga cgagccctga 540 agcattttgg ttgcatcaga aaacagatgg aaggccagtc ttcacagatg catatacttc 600 atcctggctt ccacccacag aggttgcatc tgtgcagaaa ttcatcccag agcaccaggc 660 aggtgggtgt caactcctgc tgagatttcg ctgtatcang aaactcatgc atctggtgca 720 gatgtcccgg agtggctctg acagtccang gcttgggcag tggganacct gatgacagcc 780 ttga

<210> 453

<211> 851

<212> DNA

<213> Homo sapiens

### <400> 453

acaccaagct gaagcggctg gagatcacgc cggtggtgtg caatgtggaa caagttcgca tcctgagggg actgggcgcc atccagccag gagtgaaccg ctgcaaactc atctccagga 120 aggacticga gaccetetae aatgactgea ceaacgeaag tictagacet ggaaggeete 180 240 ctaagaggac tcaaagtgtc acctccccag agaactctca catcatgccg cattctgtcc 300 ctggtctcat gtctcctggg ataattccac caacaggtct gacagcagcc gctgcagcag 360 ctgctgctgc taccaatgca gctattgctg aagcaatgaa ggtgaaaaaa atcaaattag 420 aagccatgag caactatcat gccagtaata accaacatgg agcagactct gaaaacgggg acatgaatto aagtgtogga otggaactto ottttatgat gatgooccac cototaatto 480 540 ctgtcagcct acctccagca tctgtcacca tggcaatgag ccagatgaac cacctcagca 600 ccattgcaaa tatggcagca gcagcacaag ttcagagtcc cccatccaga gttgagacat cagttattaa ggagcgtgtt cctgatagcc cctcacctgc cccctctctg gaggagggga 660 720 gaaggcctgg cagtcaccca tcatcacatc gcagcagcag cgtgtccagc tcccctgctc 780 ggactgagag ctcttctgac agaatcccgg tccatcagna atgggttgtc catgaaccag atgettgatg ggettateae caaatggaet ttetgggeee aaagaaggag atttggeegt 840 851 catgacatgg n

<210> 454 <211> 526 <212> DNA

<213> Homo sapiens

# <400> 454

tttttgtttt gttttaactt ccccttgttt caagacaatg ctaaggaact ttaaaattgt agcagtteat atttgetggg etettaetgt gtagtggeag ggttgtaatt gegttaeeta 120 tattaactca gtcaatcctt acaacagccc tatatgactg gcataattat accettgttt 180 tgtgcatgag gaaatacagg gaattgacat actggatggc agggctggga ctcaaggaca 240 gtctgactct ggagcacage tettttgttt ttettttttt etttttett tgtgtttgtg 300 360 tetegetgit geetaggetg gaggtgeagt ageteaatet tggeteactg caaceteeae 420 ctcccaggtt caagggattc tcctgcctca ccctccccag tagttgggat tacaggcgtg 480 tgccaccacc cccagctgac tttttgtgtg tgtatgtgta tgtnnn 526

**<210> 455** 

**<211> 845** 

<212> DNA

(213) Homo sapiens

### <400> 455

cctcctgaaa atgaaaagaa ggtagaggaa gatattatca cagagcttgc tcttggagaa 60 gatgctatat ctagcagtat ggaaattgac caaggtgaaa agaatgaaga tgaaacttct 120 gcagatcttg tagaaacgat taatgaaaat gttattgaag ataacaaaag tgagaatatc 180 ttagaaaata cagactctat ggagacagat gaaatcattc ctattttgga aaagcttgca 240 ccttctgagg atgaacttac ttgcttttct aaaacatctc tccttccaat cgatgagaca 300 aatccagatt tggaagagaa aatggaaagt tcttttggtt caccatctaa acaagaaagt 360

agtgagagtt tgccaaaaga agcctttctg gtcctctctg atgaagagga tatttcgggt 420 gaaaaagatg agtctgaagt tatatcgcaa aatgaaacgt gctctccagg ttagcatata 480 acttaaatgt taaagatttt ttattgactt tgatgaactg tttaataaaa cattatcata 540 atgttttaaa tttattttag ctgcagagaa agttgagaat agtgatgact ctatagaaag 600 atgtcttaac ttcatagaat tcagaattag tgtgtgtact ctgtgagtag cattgtctaa 660 atactaagaa gggagataaa atnagtagaa aatatgccct tatagtctgg aaatagagat 720 gaagtanagc accatacact gagatacagc ttaagttagt acataattga ctagagttgt 780 acagttcttt cttgctatca cttancgaac aaatnactta gaactaaaag cctaatagtt 840 taatn

**<210> 456** 

**<211> 794** 

<212> DNA -

<213> Homo sapiens

### <400> 456

aaggogogga agoggoggta gotgoagotg gogaagttgg gogactggog gatgoaggoo ttgcggcacg tcgtgtgcgc cctgtccggc ggcgtggaca gcgccgtggc cgcgctgctg ctgaggcgga gaggttacca ggtgacaggg gtgtttatga agaactggga ctcactggat gaacatgggg totgtactgc cgacaaagac tgtgaagatg cttacagagt ttgccagatc 240 ttagacatcc ctttccatca agtgtcctac gtaaaggagt attggaatga tgtgttcagt 300 gactittiga atgagtatga aaaaggaagg actoccaato otgacatagt tigcaacaag 360 cacatcaaat ttagttgctt ttttcattat gctgtggata atcttggggc agatgccatt gccacaggtc actatgcaag aacttccctg gaagatgaag aagtccttga gcagaagcac 480 gttaagaage eegaagget ttteagaaat eggtttgaag ttagaaatge eaggttteee aggatgccct gaggagaacc atcttccctc tggggggatt aacgaaagag tttgtaaaga 600 660 aaategetge tgagaataga etteateatg tgetteagaa gaaagagage atgggeatgt gtttcatcgg gaagaggaat tttgaacatt tccttcttca gtatctgcag cctngacctg 720 780 gcactttatt thcatagaag acaataaggg totgggaaca cataaaggtt gggtootgna

taccttgggc caga 794

<210> 457

<211> 846

<212> DNA

<213> Homo sapiens

<400> 457

aatccattaa totgatgota tgatgacott ggaaataatg tacttttaaa aaatatoota 60 aagteetatg aettaaagtt cacattatet teetteataa atgaaaaatt tteatttaaa 120 180 acatggaatc agtttatcaa agtacagttt acaggtttta agtctgttcc atttctggtt agacaaactc aaatacaatg atcaaactaa aagatttctt aaaagtatga tgactattaa 240 ttgtctgcta atgaagtctg aaggtctgat aagattatcc atgaagcaaa agggaggaac 300 aaaaaaactg ttacatttct ttcttctaat ttttgagcct aaaaaccatt ttttataaac 360 gtggtttcat tgttctgaca tcttaggtgt ggcagttctc tgcctcaaga aaatttgtaa 420 aatttatatt ttagatttta gcataattte tgaaacaaac aataacaact acttaccagt 480 ttttactgta gatactggac tttgcctctt agggtgaata cttgtttgac ttcaagcggg 540 gagagtatac tttttaacca atgacttgct gattttgcag ttaagaaaga aaaacagaat 600 ccactgaaaa taaaatttct atttgaaagt ttcataagtg taattgacta acggtgagtc 660 ctccccage tgttactggt atttcaatgt ttaagaaatt attttattta cactaaatag 720 teteaacaat teeetatett ataetggeag geaggaaact gnagangttg tateaactge 780 agtttgcact gaaagaaaac aatcttaaat cacttttaat cttgcagagc atttttggaa 840 846 ggtcaa

<210> 458

<211> 425

<212> DNA

<213> Homo sapiens

### <400> 458

acceacgetg eggeaagce atggeggaa gegageege eageggaaca aactegeege 60 egeegeett eagegaetgg ggeegeetgg aggeggteat eeteagege tggaagaeet 120 tetggeagte agtgageaag gagaggtgg egegtaegae eteaeggag gaggtggatg 180 aggeggeeag eaccetgaeg eggntgeegg tgagegtegg eegeaggeeg nggaggaeag 240 tggggeegge eegggeegga gggaceteee etggageee eegggeetg gggaactete 300 gegeeeegge etgggtetgg eteegteeat geageeatte etggeaggat agteaeegag 360 aagetaeagt tgateagaag egtettgget tggaeeetgg tgettegnan ggggeeegaa 420 eatnt

<210> 459

<211> 868

<212> DNA

<213> Homo sapiens

### <400>: 459

ttcagaatca taaaaacatt tttaaaagga attgagaaaa aaaaaacctc aaagaagata 60 ccatatgagt atggtagtaa tacccaaaga taaccaaagc aatggaacaa aataaatttt 120 ataatgagaa attttaatcc ttgttatatt taacccattt gttcattcaa tgctgttata 180 cattecettt gttgtgggtt gaatetagga aaagggtett gteeaatata attaaggate 240 tcaagatgaa gcatcctgta tcgtcacggg tacgtcctaa atccaatgac aagtgttctt 300 ataaaagaca agagaaggca caaagacaaa gaaaaagcca cgtgaaacac aatagaaggc 360 420 ataaataaaa agccacgtga aagcaaaggc agaaactaga gcaatgcagc tacaaagaat gctgacagct accaaaagct gaaaaagaca agaaaccatt ctcctcttt gtcttcagag 480 ggattgtggc cctgccaaca ccttgatttt gtacttctgt cctccagaac catgacagaa 540 tgaatttctg ttattttaag ccaagtaggt ggtacagcag ccacgggaaa ctaatatatg 600 tggtttgctt tatatttatg ttggacagca ttctcttaga tcctacaacc aattcacaga 660 aaacacaggg ctgaggaacc agttaaactt caccagggaa tacagttcac aaaatttagc 720 780 ccatgggaaa ttccacagag taaactatct aatctncaca aataaattga aatggaagcc

ttctatggat gaaaagagac ttagacntat caaccagtca caaccagntt tggaaccctg 840 attaaaacca aaatggtaaa aaaaaaac 868

<210> 460

<211> 819

<212> DNA

<213> Homo sapiens

<400> 460

gtggttaaac gtacaatttg gggggcctca tcccccaaat ttatttgaat ggagcagagg 60 ggggttgtca tctttacatt ttcaaatgag cagtcctggg gctgagactg attaatgtaa 120 ccactacatt gagaattact ggtctaacat aaaagtgttc aagatgttga aacaagtgac 180 accttgtgcc gttgatttcc ttcccttttc cagagctgtg ttggtggtgt atctcaaact 240 aaaggaggta acagaatgga ctcttaggac gaacctgatt tagttagagt ttccactccc 300 atcttgaact agtggtataa tgtaggaaag cagttctcaa agtgtggaca gatgacccat 360 ggggatetee tettaceett teagggtage etcaaggtea taactatttt caaaataata 420 gtaagatget atttattgtt tteaetgata eaetgatggt teaaaageaa ggetgggtaa 480 aactactggc ggtaccttag cacaaagcaa gtcaggggca ccaaactact tgagaatgcc cttgaagcag taaaatttat tattctattt ttattttttt gaggcggagt tttgctctgt egeceagggt ggagtgeagt ggeactatet eggeteactg caatetette etecetggtt 660 gtatttttag tagagacagt gtttcgccat gttggccang ctggtctcga actccggacc 720 trangegate cacetgeete ggegteecaa agtgetggga ttacaggeat gagecacegt 780 gcccggncta ttattattaa gcttancttt tgactactg 819

<210> 461

<211> 415

<212> DNA

<213> Homo sapiens

## <400> 461

tgtttaatct gatgaatgtg gcttttttc ccttcacttt aatgttcaag aagttgtggc 60
tatttcatag atttcttctg atttattctg tgggtccctg ttatctgttc tttatgtaat 120
ctttcagtag attttcatcc ttttatatcc acattcttat gtggacttgc tgaagaaaca 180
gaatatcagt tcaaaacaaa acctaggcca ggcatggtgg ttcgcgccta taatctcagc 240
actttgggaa gccaaggcgg tcaggagttt gagaccagcc tgaccaacat gatgaaaccc 300
tgtctctact aaaaatacaa aaattagcct ggcgtggtgg cacgcatctg taatcccaac 360
tactcaggac gctgaggcag gagagtcgct tgaacccang aggcgganat tgcan 415

<210> 462

<211> 856

<212> DNA

<213> Homo sapiens

# <400> 462

atgtageceg gteegtgeeg caaagegaae ggeggeege gegegggeee egeggggtt agagteacea egeceageee acagatgtea ettetgeett teeattatta eteagtttte tgaatgccag ttgcttctag catagtgcct gctctagaga ggcactcagg aaccaaggcc 180 tatetttetg tgttgtteea etetacaeet aagttgetgt gatggageea tgtggteggg 240 gtcagggttc ccactgcact ttctgcagtg ctcccagaac tcagtatgta ctgggaaggg 300 cetgetgteg tgacageete tetttgggge cagettetge ttttgeece atetttgcag 360 tacagggggt aaattaaaca agaggatgcc tgaatgaacg atatcctggg ttcttgagag 420 acaagtggga gctgataatt ctgaaaattc attagtcaaa gcatggagat aaaggtggca 480 gcaggaaggg gagaggcaag gagtagaccc gtgacagttt tagaatctta tttgtgccaa 540 aatactttac tgcattggct tggacctcta atacaatgtt gaattgttaa ccatgatagc 600 actgtatect ggtetaatte etgaattgaa tggetagtet taccattaag aatgetattt 660 geggeeagge aeggtggete acacetgtaa ecceaceaet ttgggaggee aaggeangtg 720 780 gatcacttga ggtcaggagt ttgagaccag cctggccaac atggtgaaac cccgtctcta ctaaaaatag aaaaattaac ccgtgtgtgt ggccggcgcc tgtaatccaa ctgctctgga 840

### ntctgangca aaanaa

856

⟨210⟩ 463

⟨211⟩ 827

<212> DNA

<213> Homo sapiens

### <400> 463

gcgagcaaca ggccgtgccg ggtttgcatt tccttactgc tttgtcttga agacagaacg 60 atgccaaaga aagcaaagcc tacagggagt gggaaggaag aggggccggc tccctgtaag 120 cagatgaagt tagaagcagc tggggggcct tcagctttaa actttgacag tcccagtagt 180 ctctttgaaa gtttaatctc gcccatcaag acagagactt ttttcaagga attctgggag 240 cagaagcccc ttctcattca gagagatgac cctgcactgg ccacatacta tgggtccctg 300 ttcaagctaa cagatctgaa gagtctgtgc agccggggga tgtactatgg aagagatgtg 360 aatgtctgcc ggtgtgtcaa tgggaagaag aaggttttaa ataaagatgg caaagcacac 420 tttcttcagc tgagaaaaga ttttgatcag aaaagggcaa cgattcagtt tcaccaacct cagagattta aggatgagct ttggaggatc caggagaagc tggaatgtta ctttagctcc 540 ttggttggct cgaatgtgta cataactccc gcaggatctc agggcctgcc gccccattat 600 gatgatgtcg aggttttcat cctgcanctg gagggagaga aacactggcg cctctaccac 660 cccactgtgc ccctggcacg agagtacagc gtggaggccg aggaaaggat cggcaggccc 7.20 ggtgcatgag tttatgctga aacccggtga tttgttgnac tttnccagag gaaccattca 780 tcaagcggac acttctgcgg gctggcccac tcgactnacg tgaccat 827

<210> 464

⟨211⟩ 863

<212> DNA

<213> Homo sapiens

<400> 464

| aactcattga | tgaagacctg | tgcttgggca | aagctaagaa | acaagaacaa | actgttgagg | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| agaagaagaa | gatgcctatg | gaaaatgaga | accaccaggt | attcagtaat | ccaccaaaga | 120 |
| tccttactgt | tcaagaaatg | gctggattga | ataacaagac | aattggatat | gagggaattc | 180 |
| atagccctag | tgtgcttcct | tctggtggag | aagaaagcag | atcaccatct | cttcaactta | 240 |
| agcctctgga | ttccagtgtt | ttacagtttt | ccagtaagta | caaatggatc | ctaggtgaag | 300 |
| aaccggtgga | gaaacgaaga | aggctccaga | atgagatgac | aacaccttct | ctagattatt | 360 |
| ccatgcctgc | tccttacagg | agggtagaag | cacctgttgc | ctacccagaa | ggggagaaca | 420 |
| gccatgataa | atcgagttct | gagagaagta | caccaccata | ccttttccca | gaatacccag | 480 |
| aagcaagcaa | gaatacaggt | cagaataggg | aggtttcaat | tctgtatcca | ggggccaaag | 540 |
| accaacgcca | ggggtccctg | cttcctgaag | aattagaaga | tcagatgcca | agattggtgg | 600 |
| cagaagaatc | taacagaggt | agcacaacca | taaacaaaga | agaagtcaac | aagggacctt | 660 |
| ttgtagctgt | tgtgggtgtt | gccaaaggtg | ttagagattc | aggagetece | attcagctga | 720 |
| tcccttttaa | cagagangac | ttgctgagag | acgaaaagca | gttgaatcct | ggaacccaat | 780 |
| gccttattct | gnggcctctg | ctgcaatccc | tgctgagcca | ttggggagaa | agcaagagct | 840 |
| ttgaggagac | caaagtcata | atc        |            | a          |            | 863 |

**<210> 465** 

<211> 858

<212> DNA

<213≻ Homo sapiens

# <400> 465

| tacacatgag cctco | ctccgg cagaaaatag | cccagctgga | ggaggagaag | caggcacgca | 60  |
|------------------|-------------------|------------|------------|------------|-----|
| cggccttggt ggttg | gagagg gacaacgcgc | atcttaccat | caggaacttg | cagaagaagg | 120 |
| tggagagget geaga | aaagag ctgaacacgt | gtcgagactt | gcacaccgag | ctcaaagcca | 180 |
| aactggccga cacca | aatgaa ctgaagatta | aaactttgga | acagactaaa | gccattgaag | 240 |
| atctaaacaa atcca | agagac caactggaga | agatgaagga | gaaagctgag | aaaaagctca | 300 |
| tgtctatcaa gtcag | gaactg gataccacag | aacatgaggc | taaggagaat | aaagaaaggg | 360 |
| ccagaaacat gatag | gaagtg gtaaccagtg | aaatgaagac | actaaaaaaa | tctctggaag | 420 |

aagcagaaaa gagagaaaag cagctggcag acttcaggga ggtggtgtcg cagatgctag 480 gcttgaacgt gaccagcctt gctcttcctg attatgaaat catcaagtgt cttgaaagat 540 tgatccattc acatcagcat cactttgtta cctgtgcctg cctcaaagat gtgactactg 600 ggcaagagag gcacccacaa ggccatttac agcttcttca ttgaacactg tatctcttga 660 gagaggtggc cataagacat ggcacacaat tcccaatttc acaaattcct cctgtctttg 720 agatttgatc agttggtgaa tattttatgc tttgatgata tagtgagaat gcatcacttg 780 caaaaacgat ctcaaaagtg tcagccttag ataacgttca catttaaaac gcctattatt 840 catttactag cntttang

<210> 466

**<211> 590** 

<212> DNA

<213> Homo sapiens

<400> 466

aatcgagtcg gccttgttgg cctactgggc ggcgcttcct agttcggctg gttcttctgt 60 cgccggcttc agcagcccgc gcccgggcag gtaaggcatt ccccgcctta atgcctcggt 120 caaacgtcgt ccgaggtccg cttccaggcc ttggcacctc tgccccaggg ttgctggggt 180 cggctgctgg aacggaaatc: tctttatcat ccgtgagaaa agttnnagag gaagtgggtt 240 cctttgacag agcttactcc agaagaaaga cttgggtagg tccccggtaa tcaagaagtt 300 enteggeect gaggaagage etgaggettg gagggaegte acceagetgt tetggggege 360 agtcggacct caagtttctc acctctcagg ccctggattc cgtgaacccg actgcgaaat 420 gaagtetett tteeccagaa ccagcangte atgecageae etgacagatg cetgtggege 480 cagcageteg etgageetge acacgattgt nattegettg ttteteegge etneaagett 540 ccagggaatt agaaagtgga ggcngcttat gggatcagat gagtacattc 590

<210> 467

<211> 800

<212> DNA

# <213> Homo sapiens

## <400> 467

| cctttgcgcg | ccgggttaat | gggcggtaat | ttggtaccct | tgggtgcact | ttgttttgcc | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| cctgttcatt | tgaatgcaaa | tgggtgaccc | gggcccgact | aggtgcttat | taaattgcag | 120 |
| ttttccccc  | tgccttttcc | ggaatgcaga | cttagaggag | agaggctgcg | ccctggccca | 180 |
| gcctggctcg | gctcagctcc | gcgcgccatg | gcaagctcgg | cttccctgga | gaccatggtg | 240 |
| ccccggcct  | gcccgcgcgc | cggagcgttg | ccggccactt | ccaagacact | ggccttttcc | 300 |
| atcgagcgca | tcatggccaa | gacgtcggag | ccccgtgcgc | cctttgagcc | ccggcctgga | 360 |
| gcgctagagg | cggacggcag | ccagggcaag | aaactgctca | acctctgctc | gccgctgccc | 420 |
| tgtatgatcc | ccctccagcc | cctaggctac | gaggtgccgt | caaagacact | gctcagttac | 480 |
| tcggagctct | ggaaaagcag | cctccgggcg | ggcggcggcg | gaggcggcgg | cggcggtggc | 540 |
| ggcggcggcg | gcggnggggc | cccagtgtgc | ggcgccagcg | gcttgtgcaa | aaccaactgt | 600 |
| ggcgtgtgct | gcaaggccga | gctgggcctg | gcgccgtccg | cgcttgncgc | gggcagggtc | 660 |
| atcaagccgc | aagtcatcaa | ccaaggctgt | gggctgccgg | ccagcggctc | gctctactac | 720 |
| tttaaactac | ctggacttcg | aaccgngtac | cccgccgtnt | gagcttcttc | agcggggcac | 780 |
| ctttttnccg | tcttggcctt |            |            |            |            | 800 |

<210> 468

⟨211⟩ 696

<212> DNA

<213≻ Homo sapiens

# <400> 468

| ggaacagcaa | gtggcacata | gtaggcacac | cttttattcc | tctctcatcc | tgttctctac | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| tcattaagct | gtccactctc | ttttttgacc | ttagcacatt | cctaatgctc | taaccttctc | 120 |
| agcctctttt | tttaaagtgt | cagagcccta | taaaatattg | ttaataaata | attttaacat | 180 |
| aaaaagaggt | açagatttac | agatgtacat | gcagtataaa | atgataacct | caagcatacc | 240 |
| tttctccaaa | gaaaaatgtt | acaaaactaa | acacagttgg | ctgagcttga | gttgcattac | 300 |

tgcatactta ggacgtgcca gcacataaca aacgtttaag gaaagtgatt acaagaagaa 360 aagttaatat tttagacaag ttgattcagt ttttcttggg ttgtatgatg ttagaagttg 420 actactgtct caaattggag cctgtaggcc actggngttt tataaggcac ttgattggag 480 aactaatgct ttaaccacac cagaataatt gcattctgca nattaaatgc antgccatat 540 gctgccaatc cccctgcgt gtcccccggc attatcttct ttctcgacca ccactgatga 600 gcatctaatt gcccttcaa ggccttattc agatggcct tattggagct gnttctgaat 660 ctttttagac tcatttgggc cccttnactt aagaan 696

<210>,469

<211> 869

<212> DNA

<213> Homo sapiens

## <400> 469

tacattaaaa tgcacttaat atcactttgt aaagcccaga tgagtgcaaa tgtgcctgta 60 acticcicci ttaatcigic caggiagiat ttagictita gictiacati tictitcicc 120 ctttatttca tgaaattcct tgagaaaact tcaacagtaa agaaagaaat ttcgttcatc 180 tcacaactct tccaaacgag gaaacttagt gaaatatttc agagcttcta gatgtgaggt 240 acaaaacttg ggatcaaatg gaatcttgat tcactaacca atttaagatc tgacttctaa 300 ttttaggaac tttgggttat gaacgettee attttatace tgtgtetagt tagtttetge 360 ctatctatcc aagaagcttt tatcaagggt ccaccatgtg ccagccactg aagtagttat 420 aaatacaagg atgtgtaagg tatggatgat ggtatacgaa ctgtcatctt actggatttg 480 teegetetgt taaagataeg gtteegaaaa etttttaaag eectagagag ggetttaagg 540 caatgtagca tcatatatag aggcatcaac ctgttcatat ctttctattt aacagaactg 600 tgcacctggg cacaagggtg tgcacaacag gatgtgtaca gcagcactgt taaagtgtag cacatccata ctacaggate ttatgcaact gttggaaaga atgaagcgat gctgcactgt 7.20 ggtcatgcag tgatctctaa gacatattaa ctagaaagcc aaagggttaa caatgtatag 780 caactgggcg caatgactng cgccctgtaa tcccagcact ttgggaaggc tgantanggg 840 869 cggatcacct gaggtcagga gttttgaaa

<210> 470

<211> 822
<212> DNA

<213≻ Homo sapiens

# <400> 470

| gttatgaaga | tagtctgtct | tgataaaatc  | ccaggcttaa | tttagataat | gtcagtctgc | 60  |
|------------|------------|-------------|------------|------------|------------|-----|
| cacacggagt | tggtagccat | aaaatgctac  | ttctgagttc | tacacttagc | tgtagaatgc | 120 |
| aaattgagtg | acacctttaa | ggctacagta  | cttgattttt | taacatcttt | tctgttgggg | 180 |
| ctttgactag | ttctgcagaa | agggattggg  | acaaaaccag | gagtttgtta | tttttagttt | 240 |
| ttctttgcca | tttagcagca | gaaattcgat  | ccccactgat | aaacagaacc | tgctggacca | 300 |
| cctttgctca | gataatttct | ataacacaga  | ggttaactca | ctattggttg | aaataaatgc | 360 |
| ttaaactttg | aagcactttt | taaaaaatca  | taagtacacc | agtgctgcac | ctccaatgat | 420 |
| aatcatttag | gaaacacaga | aaacaaaaat. | taaatgaatg | gtccacatgt | gaataaataa | 480 |
| ccttaatcca | ctcggatatg | cagcagctct  | tcccactgca | aatgggtttt | gtggtggtaa | 540 |
| cttgaattgg | aggagagaga | cagctggcct  | ggtgctgctg | ctgctgccaa | aagccatctt | 600 |
| gttaacatgg | tttatttcca | ttctgtcttc  | ctgctaccca | caagagccct | gtcctcctgt | 660 |
| ctccctcctc | tttcatcagt | tttcagtggc  | atactgncct | cagtcacatt | tctcctgctt | 720 |
| tgccagtaaa | cagcatgtag | ctgattcttc  | tagtcctcgn | ctgcattcct | acaattnctg | 780 |
| ctcattccga | attgggtctg | gtatctncta  | agttggtgca | ct         |            | 822 |

<210> 471

<211> 798

<212> DNA

<213> Homo sapiens

<400> 471

agcagagga acagggaaga aacctaaagg ctgcaggctg ccaggtgtgc ttggagagcc 60

cccttcttcc gccgggcctc gcaagcagcg taggactgtg gagaagggcg gtgggcaagg agggaactcg agagcagcct ccatgggcac acaggaggc tggtgcctgc tgctctgcct 180 ggctctatct ggagcagcag aaaccaagcc ccacccagca gaggggcagt ggcgggcagt ggacgtggtc ctagactgct tcctggcgaa ggacggtgcg caccgtggag ctctcgccag cagtgaggac agggcaaggg cctcccttgt gctgaagcag gtgccagtgc tggacgatgg 360 ctccctggag gacttcaccg atttccaagg gggcacactg gcccaagatg acccacctat 420 tatetttgag geeteagtgg acctggteea gatteeceag geegaggeet tgeteeatge 480 tgactgcagt gggaaggagg tgacctgtga gatctcccgc tactttctcc agatgacaga 540 600 gaccactgtt aagacagcag cttggttcat ggccaacgtg caggtctctg gacggggacc tagcatetee ttggtgatga agaeteecag ggtegeeaag aatgangege tetggeaece 660 gacgetgaac ttgccaettg ageceecaag ggactgtgcc gaactgcaat ggagtttcag 720 gtggatgaca cagacccaat cccttgagct tnctggctgg gggtccttaa gccttcnttg *-*780 gacttggggc ttnttcca 798

<210> 472

<211> 862

<212> DNA

<213> Homo sapiens

## <400> 472

agtgctagct cgccgcgcc gcctccggg accacctgc ttcatgtgt gatttccacg 60 gctcttgccc agaggcggt acactgtgtt ccaatgtgcc acggaactca cgcagtggca 120 ctttgtggct tcatgaagga agaggcaggc cacgcaacac ttcctccca agccaaggag 180 aagtatcact tttagaggca gaggagcgga aggcagtgg tgtgaccaaa agtgccattt 240 gttaaagctt atcttccttg ccagatttta aaaactatta tggaaaatct caagcattca 300 caaaagtaga gagaaagaaa ggactctcag actgttggag cagaactact gagaaaaacc 360 aggcattgta tcttcagttg tcatcaagtt cgcaatcaga ttggaaaagc tcaacttgaa 420 gctttcttgc ctgcagtgaa gcagaggat agatattatt cacgtaataa aaaacatggg 480 cttcaacctg actttccacc tttcctacaa attccgatta ctgttgctgt tgactttgtg 540

cctgacagtg gctgggtggg ccaccagtaa ctacttcgtg ggtgccattc aagagattcc 600 taaagcaaag gagttcatgg ctaatttcca taagaccctc attttgggga agggaaaaac 660 tctgactaat gaagcatcca cgaagaaggt agaacttgac aactgccctt ctgngtctcc 720 ttacctcaga ggccagagca agctcatttt caaaccagat ctcactttgg aagaagtcag 780 gcagaaaatn ccaaagtgtc cagaagccgg tatcggcctc aggaatgtaa gcttacagan 840 ggtcgncatc tcgttcccac cg

<210> 473

<211> 811

<212> DNA

<213> Homo sapiens

## <400> 473

| C   | gacgeteca | cagctcgccg | cggccggggg | gcggtgcgcg | gaccgtgcgc | gccgcgggcg | 60   |
|-----|-----------|------------|------------|------------|------------|------------|------|
| C   | cagatgtgc | agtccccgcc | gccgccagtg | accgagccgc | agtccgagcg | gtatcgggcc | 120  |
| g   | cctccctga | tgctgcgggg | gcgaccttga | gcgtacagcg | gcttccctcg | gtggggaccc | 180  |
| C   | gacatccca | gcgctgtgcc | cggtcttgcc | ctctgtagcc | cggttcgccc | cgcgcttgga | 240  |
| , C | atggaaggg | gccgccgcgc | ctgtggcggg | ggaccgcccc | gacttggggc | tgggggcgcc | 300  |
| g   | ggctctccc | cgagaggcgg | tggcgggggc | gactgcagcc | ctggagccca | ggaagccgca | 360. |
| C   | ggggtgaag | cggcatcacc | acaagcacaa | cttgaagcac | cgctacgagc | tgcaggagac | 420  |
| C   | ctgggcaaa | ggcacctacg | gcaaagtcaa | gcgggccacc | gagaggtttt | ctggccgagt | 480  |
| g   | gttgctata | aaatccgttc | gtaaggacaa | aattaaggat | gaacaagaca | tggttacatc | 540  |
| aį  | gacgagaga | ttgagatcat | gtcatctctc | aaccatcctc | atatcatcag | tatttatgaa | 600  |
| g   | tgtttgaga | acaaagataa | gattgtgatc | atcatggaat | atgccagcaa | aggggagctg | 660  |
| . t | acgattaca | tcagtgagcc | ggcgacgcct | cagtgagagg | gagaccggca | cttcttncgg | 720  |
| Ċ   | agatcgtct | ctgcttgtgc | actattgtca | caaggaacgg | tgttgggtcc | acccgggact | 780  |
| t   | tggaagctt | gaaaaaagaa | ccagtnatna | a          |            |            | 811  |

<210> 474

<211> 866

<212> DNA

<213≯ Homo sapiens

## <400> 474

| caaatgcgta | cctttctgtt | tttaatttgt | gtgtctccaa | aaaaaagaac | ctttcatact | 60         |
|------------|------------|------------|------------|------------|------------|------------|
| tggcagcttc | actactaagc | tttaagccct | gtatgtaatt | tgttacccag | ttcctctgct | 120        |
| catccatcca | ttcattcaaa | aaatatttat | tgaggatttg | caaggggttg | ggaacagagt | 180        |
| ggtgaacctt | gaaggtgatg | ccactgctct | tggggagctc | agcggtgact | ctcccatat  | 240        |
| atgtaaataa | acatataaac | agaaatgtgg | ataaaccaac | ttctgagcaa | attaacatgt | 300        |
| atgtgattta | aaagtaagat | gatttgcaag | agaggagcag | gtgatgaagt | gtaatcaaga | 360        |
| tcggcctagg | atgatcaggg | aagcgctttt | taggtgggtg | acatgtgagc | agaaagacct | 420        |
| gcctgaagag | aagggataaa | ccagcaaagg | cctgggggaa | gcattttaga | cagagagaca | 480        |
| catggtgcag | agaccatgag | ctgagaagga | gcctggcatg | tccaggggct | gacagaacac | 540        |
| tggtaatgtc | acagggtgtg | gàagaactgg | cataggtgag | gtcagagcat | atagaaagag | 600        |
| cangttgtaa | gggattttgc | atctcacaac | gtggtccact | agactattct | cccttccacc | <b>660</b> |
| acccacccct | atgcacacat | ncaagcagtg | tgataagttc | tgtccattct | acatacttga | 720        |
| tatctctcag | atctcctctt | tcccactact | ttaacaggca | ccatcatctt | ttggcttatg | 780        |
| ctcaatggtt | gcctactgac | ttncttggct | tctaggactt | ncttcctaac | catctttcat | 840        |
| aatgccaaac | ttggatagnt | ctaatt     | •          |            |            | 866        |

<210> 475

<211> 864

<212> DNA

<213> Homo sapiens

## **<400> 475**

atgcatggta aatttgaatt tccccattgt tctctagagc taggtcaaaa aaacaactgt 60 ttcttttctt attccactat taataaattg aaagcttgct gtacaaaggc aacagcaact 120

taaaaaagaa aatctggaca atagatgtgg actccaaggg gccactgcca tcccttcctg tgtgctcttt ttgacaagta aatcactcca gttagctgat gtcctgaaat gacatttgta 240 cctgaggcaa ttcttattag agcttactca ggacttttca aacatcagga cacacatagc 300 aatttggatg ttgtaaaact acgtgttaca tttggagagg tcttgttgag aaggcaaaat 360 420 tttctaaata ttttgatatc aatttgggta aagaaaggaa tacttttgtt agaatgagaa ttaaagagaa aacaaaagaa tcttggcaaa attttccctc tgaaattaca aactttagga 480 acttttccag atgtatcgaa tttaatttga cattgatgtc actcttcata ccaagtgaat 540 ctattctcat gaactttgaa cccatgttaa ttttggaccc tataactaat ttcctttctg 600 tateceatgg tggteaaage agtaaaggag tttagagata ettageaaat gecatteata tagtattgtt agccaaacta ttattccttc cttagaagtt gatgtatcag aaaatttata 720 agttatttgt atttatatat aagtacatca gaacttgccc acatgataac tcatggttgc 780 tttaataagg gaaaatatgt tatttgangg taattatatg atagtgagga acattttaca 840 attatttaca gngnttgaca ttaa 864

<210> 476

**<211> 861** 

<212> DNA

<213> Homo sapiens

#### <400> 476

catagaagga ggacaaagga acgaaatgaa atcatgctca caatgaactg ttcattacat 600 caactgatct ctctctct ctcttcctct ctttctctt ctcccatacc ccaaggcaaa 660 attttttaa agaaatgact ttaaaaacta tcatttctgt attttaatta catctcttag 720 aaataaaatt atgtttgcac catagctttc taagaaaaaa aaatgtgttt ttaactgagt 780 cttagttgct tagtgctttt attggggtat ttttagactg tattttaacc acacttccaa 840 ggatcatgtt cattgcctta c

<210> 477

<211> 866

<212> DNA

<213> Homo sapiens

#### <400> 477

tatgaaacag acgtggcaga gtaaacctcg aaaccgacct tcttttcggc agacactcat 60 gcatttagac attgcctctg cagatgtact tgccaccca caagaaactt acttcaagtc 120 tcaggctgaa tggagagaag aagtgaaaaa acattttgag aagatcaaaa gtgaaggaac 180 ttgtatacac eggttagatg aagaactgat tegaaggege agagaagage teaggeatge 240 gctggatatt cgtgaacact atgagcggaa gcttgagcgg gcgaataatt tatacatgga 300 attgagtgcc atcatgctgc agctagaaat gcgggagaag gagctcatta agcgtgagca 360 agcagtggaa aagaagtate etgggaeeta caaacgaeae eetgttegte etateateea 420 teccaatgee atggagaaac teatgaaaag gaaaggagtg eetcacaaat etgggatgea 480 gaccaaacgg ccagacttgt tgagatcaga agggatcccc accacagaag tggctcccac 540 600 tgeateceet ttgteeggaa gteecaaaat gteeaettet ageageaaga geegatateg 660 aagcaaacca cgccaccgcc gagggaatag cagaggcagc catagtgact ttgccgcaat cttgaaaaac cagccagccc aggaaaattc acccatccc acttacctgc accaagctca 720 atcccaatac cettetette atcaccataa ttetetgeag cagcaatace agcagecece ttctggcctt gtcccagagt caccatncca gactcaatat gcacggacag gacatagcaa 866 cctgcgccaa caacctgagg tatttn

<210> 478

<211> 857

<212> DNA

<213> Homo sapiens

# <400> 478

| accatcatgt taccatat | tc ttgccaaaaa | aaaaaaaaa  | aaaaaaaaa  | caccagagtc | 60  |
|---------------------|---------------|------------|------------|------------|-----|
| gttacatgaa gtatcttt | ga tcactgaatt | tccagcactt | ctttgttgtg | tctagatgct | 120 |
| aagccctttt ctaatttg | aa aaaaaaaaaa | aaacaaaaaa | ctggagacct | gattctgttn | 180 |
| atctcttgta gtttctct | ta tctctgtttc | taaccactct | atgtagtgcc | tettttttc  | 240 |
| tgtctacaca cacacgga | gc atccaccata | ccaataatca | cagtatgtgg | taatgaaaag | 300 |
| tggaagggaa aaatggco | ct tgcttctcac | agacaaactc | actatctcaa | tggatcattt | 360 |
| ttgttttttt gttttgtt | tt gtttttgana | cagtctcact | ctgttgcgca | ggctggagtg | 420 |
| cagtagtgca atcttago | tc actacaacct | ctgcccccgg | gttcaagcaa | ttctcctgcc | 480 |
| tcagcctcct gagtagct | gg gattacggca | cctgccacca | tgccctgcta | atttttgttt | 540 |
| ttttagtaga gatagggt | tt caccatgttg | gccaggctgg | tctcgaactc | ctgacctcaa | 600 |
| gtgatctgcc cgcctcgg | cc tcccaaagtg | ctgaaattac | aggcatgagc | cacagcgccc | 660 |
| cgcctcaatg gatcctga | tg agctacgcaa | accattattt | ttatgtcttt | acgaatgcca | 720 |
| ccagaaagtt cattttgn | tc tttctgaaaa | caaccatgat | tataagatgc | ttctgaaaca | 780 |
| cggaagtgag agaacatg | tt gtacagagaa | catgcatcct | ttgccctgcc | ccatgnacct | 840 |
| atgctaagca tttataa  |               |            |            |            | 857 |

<210> 479

<211> 862

<212> DNA

<213> Homo sapiens

<400> 479

aacaaacatg cagacagtct tacagctgca gttgcctgag ccttaagggc cttgctactc 60

aaagtgtggt cctcggaccg ccagcatcag catcacctgg gagcttgtta gagaaaacaa 120 atttcagacc tcaccgaccc cacggaatca ctatctgcat tttaacgaca tctccaggtg 180 atteatetge acacaagtte aaccacagge tgaccattta gagaagetgg acttgagtgg gattttgcag tttttccttt tgatggcctc ctcccctttg cttcccctcc tacccttctg 300 actectigia gettattita gaacatgieg ggateetget tetetigiea acaaaagget 360 420 gttgttaaaa tettteagee ggeageagea atgtttaatt catggaetag aaaattaatt ttattttcat gaatagagct gaggaaaaat agcaaggaga ctctgtgcat ggcccttggg 480 aatccagctt gtctatttaa cagatgaact ggcaacagtg gggaggcctg aggggagggc 540 tgccttctac aaacttgtgt agcaaattgt attaggatgc ttttggctgc aggtatcaca 600 aaattcagct tcaaatggct taaaagaaaa ggaaaatttc taatttcact gataaaaaat 660 cttgagatag ggtactitta ngatgaccca gaaatgccat caaatagcag gtttggtttc 720 tgccatggtg gcttggtgca ttcagntttc ctcatgggta caaggtggcc cgccagagtt 780 ccgggcagca catgggagtc aatggcctat ggnangagaa agaggttgcc cttcctgaag 840 ttcatttatc agaaaccaaa at 862

<210> 480

<211> 865

<212> DNA

<213> Homo sapiens

#### <400> 480

caattaaata cagtggacac aagccagtgt tatttattaa atcctggtgc tcaataaggg 60 tgcctgctga gggttgggag cctggggcca ctacatcctg ccttttctct aaggagatta 120 gctagtatta aagaagtgtt aagactagcc cagactgagt ctttctcctc aaagcatgaa 180 240 gcacctgaga gcatcctgct ttcagcagga gggagccact cagaaactgt tccctagaac 300 cctgttgttc aaagtgtggt aggaggacca gcagcctggc tggtcaaagt agagttctca cctaggagat gtgggaacta cagaaacttg gccccctaga tcttcagaat cagaatctgc 360 420 actttaacaa agttcctagg tacctcggtg cccattaaag ccagaggacc cctgacctac 480 aggecacaga eccagataaa geageecaag etategttte etettgetet ettgagteae

accagegagg cttttgtggt geettteatt caetgeagtg tegagatgtg cegecaagte 540 acgaatattg teeacaetgt ecetgeagtg taacattate agggeetagg aacgaetgag 600 eceetegtag geatgtgaca etgtgtteet aagaetgett etetettte atgaataaaa 660 geagacaeaa egeangtgtt tagaaaaeta gnetgggatt aatatttaa getagaeett 720 ggatgeetea gaetttatat tegtggttta tttteaatte tggteattgt attggetett 780 acattaaata taetggtttg geeetagaaa tggeaaaate aegaagteae eaetetgget 840 ggeettaagg ageteacaag eeatt

⟨210⟩ 481

<211>.745

<212> DNA

<213> Homo sapiens

## **<400> 481**

tattgatctg tgtaggaatg tactgaattt cacgaaacac agcttattta tttaggtagt 60 agtoccccaa acttgaatot agtgaaaggt ggcagacatt ttagctcaga gttttctgac 120 tgatgtcatc ctatgtgatg tgtactctgg ggtactcaca tcctatgtga tgtgtctcaa 240 gtgactgtca cacagtggac actttaccag tgctagcttg aatgaggtct acctccatgg 300 cccagccctg ctgcccccta gtgatttcat tgaatgggat gaaaaggtaa aaagtgctta 360 agacctgtag aagggactac atcaggtagg gtatgggaat atttaggact actttggtaa 420 ttattgaaaa gtotagagta ttaagocact ggtggttttg tgaggcacga gtgagttgaa 480 cagtttggtg ggctttggtg tatctttgct ccagaattat atcaccagtt agctgttagg 540 tgctgccatt tggtaacgtg ccaacttttc aaaaatggtt tgccccaaac tagattttc tatettetee aaageeagag eeacetteet gteetagtge atttttagea gtgeecegte atcttactgg cattcacctg ggcttnctgn gctcaatcag gggtcaagtc tggcctgatc teagttneae agtteeteta etetg 745

<210> 482

<211> 755

<212> DNA

<213> Homo sapiens

## <400> 482

| tttgtttaat | acatgttaaa | caatagtcca | tcagtggttt | gtctctttta | agatcactaa | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| cttggggcat | accgtaccgg | ttggacaaga | tctcaaatgg | tgacttaact | tttaatgagt | 120 |
| gcttataaaa | acatgtgtgt | tgcctcatga | cactatgcaa | ttgctgcttt | agtggtgctt | 180 |
| tttgcattcc | agttgaattg | tacataggtt | ggcccatatt | gctcaccatt | tagttagatc | 240 |
| ttcattgttt | agatctcagt | atgttgaaaa | tctgggaaca | gcatcataga | aaactatatc | 300 |
| ctcctctt   | agaacattgc | ttagcaaaaa | ttatgttttg | ttctctaaat | gaacttttcc | 360 |
| aacttcgaaa | ttttgtgact | tttaaataat | gtataatact | ctaatgttat | tctaggaaca | 420 |
| agccagcatg | tttggcctta | tttacaaagc | agttaatata | ccagtgttag | aataagtcaa | 480 |
| aacactgtac | caatgaaaat | gtgtgctctt | ccaagtagta | tatgtgtttt | attttaatat | 540 |
| ttagaagatc | taaaaagcta | taggaacaca | tgttccactt | gtaacttaat | agcatgcctt | 600 |
| aaacttaaag | atatctggcc | gggcgcggtg | gctcacgcct | gtaatcccag | cactttggga | 660 |
| ggccgaggcg | gtggatcatg | aggtcaggag | atcgagacca | tnctggctaa | caaggtgaaa | 720 |
| cccgctcta  | ctaaaaatnc | naaaaattag | cccgg      |            |            | 755 |
|            |            |            |            |            |            |     |

<210> 483

<211> 876

<212> DNA

<213> Homo sapiens

## <400> 483

gtggctgtac tggcggcgc agggctggcg gcttaggccg cagaggtctg tgggcctgag 60 cccacgctgg actctgtccg ttctgcgatg actgctgctc tggccgtcgt cacgacgtcg 120 ggtttggaag atggggtgcc taggtcccgt ggcgaaggga ccggggaagt ggtcttggag 180 cgggggcccg gcgcggccta ccacatgttc gtggtgatgg aggacttggt ggagaagctg 240

aagctgctcc gctacgagga ggagttcctc cggaagagca acctgaaggc cccgtccaga 300 cactattttg cactgcctac caaccetgge gaacagttet acatgttttg tactettget 360 gcttggttga ttaataaagc gggacgtccc tttgagcagc ctcaagaata tgatgaccct 420 aatgcaacaa tatctaacat actatccgag cttcggtcat ttggaagaac tgcagatttt 480 cctccttcaa aattaaagtc aggttatgga gaacatgtat gctatgttct tgattgcttc 540 gctgaagaag cattgaaata tattggtttc acctggaaaa ggccaatata cccagtagaa 600 gaattagaag aagaaagcgt tgcagaagat gatgcagaat taacattaaa taaagnggat 660 gaagaatttg tggaagaaga gacagatnat gaagaaaact ttattgatct caacgtttta 720 aaggeecaga catateaett ggatatgaac ganaetgeea aacaagaaga tattttggaa 780 tccncaacag atgcttcaaa atgganccct aaaaatggaa cgtggtacta ccggaactga 840 aagtcccgat taggacttga caataaggga ttgggn 876

<210> 484

**<211>** 797

<212> DNA

<213> Homo sapiens

#### **<400> 484**

aaggttatgt gtgatcgggt gtgggagaga cactctttgg ggctctgtat gggacattga 60 gagaccgtat gtgggagtga gagaccgtgt gtgacggtgc gtgtgagggg gcagtgtgtg 120 tggctgtgtg caacatggtg agcatacggt gctgtgtgtg tcacagaagt agattctgtg 180 tgagagagag tgagactgat gactgatgta cactgagagg tggtgtgggc aggtgtcatg 240 agaggcacat agggggcctg ggtgggacag acacagtgag tgtcagacag tctgtgttgg 300 ccactctgtg tatggcttgt gaaaaagtgc gtgatccggg cacattgctg taatcccagc 360 actttgggtg gctgaggcgg gaggatccct tgaggccagg agtttgagat cagcctgggc 420 aacataggga gacccctccc cccacccccg ccgtctctac caaaataaaa ataaaagaaa 480 ttaaccaggt geggttatgt acctetgtgg teccagetae tgggaggetg aggttggagg ·540 600 ategettgag cetgggaagt ggaggetgea gtgagetaag ategtgeeae tgeacteeag 660 cctgggtgac agagagaga accttgtctc aaaaaacaaa acaaaactgc gtgactatgt

gtgacactga gctggtgaga gatggcagcg ttgtgacagt gcatgccaaa agtttgcggc 720
ttgtgcaggg cactcggaac cnaaagcctn agggaggcct tgtgtgtana aggcaagaaa 780
tgatggaaaa ggtggga 797

<210> 485

⟨211⟩ 832

<212> DNA

<213> Homo sapiens

#### <400> 485

agttaaaaca attttttaag agaaaggaga taaccagagc atagccagca gaaggactcg catgaggttt ggtgggactg cctagggaga aggaggcagc tggctgcgtg acagagccca gtgatagggg agggcctgtg accccttaag gagctgagac gctgtcacag agcaatggga gcgctgagtg atggagctgg atttgtgctt ttagaaaagc tttgttggct gctgttggga gaatggattg gaaggggtg agactgcagt cagagactcc cataaggaag ctgttactgt aatcacaaca acagatgeet acacteette ecaagaette cetetetgat ettagaagea 360 ttgtcaaatc tgggttccca gcctgccatg gcaagctgct tgctacttgg gagtgaaaag 420 cccttgtgga gctttttctt attcggtgac tgctcataaa gtgccttcac ctcgcttgcc 480 ttattageca giccigecte caaattacea ceaetigete etiteaggag tetetteece 540 ctaaagtccc tattactcct tctctctgct ttcagatcag aaacagaaaa agtcaccttc 600 cctaagagte tgetecagte cagtagaaat getttaaaat ttttetggee teanetgeee 660 ttcttgagca cagaaatttc tagaatattg aatgaatcac tggttcttta taatcatttt 720 gtccagtttc aatcactgca ttttaggaaa gatttgaaaa actgaaggac aaagtggggc 780 ctttaaagga cttangattc tttcaganga aagtatctaa ngaacaagtt aa 832

<210> 486

<211> 762

<212> DNA

<213> Homo sapiens

## <400> 486

| taaaactccc | gtctctgcca | aaaatacaaa | aattagccgg | gtgtggtaac | atgctcctgt | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| agtcccagct | actagggagg | ctgagatggg | agaatcgctt | gaacccggga | ggcggaggtt | 120 |
| gcagtgcgcc | gagaccacat | cattgaactc | cagcctgggt | gacagagtga | gactctgtct | 180 |
| caaaaaaaaa | aaaaaagttg | tggtcataaa | acttggttca | gatgccgtca | gcggcatgcc | 240 |
| ttgcctaggg | tcttgccctc | cttgtggcct | ctgcacaccc | tgcctagtct | ttccttccct | 300 |
| cctgaccttt | ctgaatctga | ttcatccttt | tgccccaagc | agaatcccac | cttctccagg | 360 |
| aaggtgttag | cctttgtagg | acccactctg | ggacactggt | acctgctgcc | tgtagccgtg | 420 |
| gcctttcccc | ttccagaggg | cagggcggtc | tcagcaccct | cttggtccac | agctgatctt | 480 |
| ttttagctgc | tgaagggtct | ggggctgtgc | cctggggaag | ccatgacgct | ccctgcgta  | 540 |
| gggtcactgg | gtggctcctg | cagccagact | tggacaccct | ccctttgcag | atttctgtct | 600 |
| cctccccagg | aaccagctgc | cttccttctg | gggcgaattc | attettatee | cacagcccca | 660 |
| gcataatggg | atctggctca | nggaggcctt | tcctgatctg | ccctaggttt | gccttccctg | 720 |
| tgagcaagcc | cttactgncc | tctgncttcc | cgttgagctg | ca         |            | 762 |

**<210> 487** 

<211> 852

<212> DNA

<213> Homo sapiens

## <400> 487

tgtacaagag atcattgtca tcctgggtgt tctttgtatt cttcatacta gaaatccata 60 acacgccaaa tgcccttaga accatggaca gcacccaggt tttacaaatg tcttctccag 120 gcttcagaag gaaggtggtg gacattcttt ccatcatgac acaaaccaac aattacatac 180 caggctttgt tggtgagaaa gcaaggtggc ccacctggag atttatgccg aaacaaccac 240 tttacaacac aacccacgga gtccttgacg ttggcttggt ttgtcaatcc caccacctca 300 taccatttag aaacttatca gctattcta gataactggg tgttttagtt tcctgtagat 360 aaaactgaag gctaaattga atatatgact aagttattta ctatgaggaa tcttagtcca 420

ggaaaacctc tcaaaataca caaatgtctg agagatgtaa tatatttaat taatccctta 480 ctccttttat ttttattttt tatttttca gagacaaggt cttgctttga cacccaggct 540 ggagtgcagt agtgcaatca gaggtcatta cagcctccaa ctcctgggct taagtgatcc 600 tcctgcctca tcctcccaag cagctggagc tacaagtgtg caccatcatg cctggcccct 660 ttatteetaa aegittette atgaaggaag atneaaattt acatgageee atgetettea 720 catgggtaag gggaaaacag agagactcca gggcacccac atattgggct ttatcattgg 780 nctaggaaca gtcttggaat aggcagcttg ggttctactn ccagaaatac tttgccatnc 840 attaatttat tc 852

<210> 488

<211> 806

<212> DNA

<213> Homo sapiens

#### <400> 488

gaaccaggag tttggcgtga ccatggtgag agaagacggt ccaagaaggg acgttatcag 60 gccacttttt gggtggagaa ggaggtagtc agaccgtggc caaatttcct tcacattatc 120 ctagcatatt ttcattctgg tcttagctct taaacttctc caagcggtga ctgttatgct 180 ttacagagtg gggaagaggg tctgggttat ttgaggcaag aagggaaggc aatagacaag 240 agaaaagaag agactttaaa agatgccgtg tgtttccaac ttttttaatt ctaaaatttc 300 tgtttcaagg ggaagcaaaa gaaaacaagg aagtatgcga ccatgaagcg aatgcttagt 360 ctcagagatc agaggctgtg agtgtctgga atcaactgcc cagggatatt ctaataagag 420 tctagagagg ataagtagta aaaatgtttg ttgttattat tttgtttttt gcttattatc 480 gtgtcttaga tttatatagc atgagatagc cagtgtttaa cagtaattta gctgctgagc 540 gatcacactg ggaaaggcgt tgggaattaa acatttctta agtgttcact ttttctaccg 600 ttatatgett tgtetgeeat ategeattta aaceteatgt cagtteggtg aagteegtat 660 agttetettt atgittttae eattacaeta etacatteee etggggtggg gecaagggga 720 780 gtgtttcttg ttgaaagatg gcaaggttag agaccttgnt tggctggcgt ttccagtgcc 806 ctggnactca aatatttttg gcanaa

<210> 489

<211> 889

<212> DNA

⟨213⟩ Homo sapiens

# <400> 489

| tataaaacca taata | aatta cttagactac  | aatgagcaaa | acacatttgt  | gggtttggtc | 60  |
|------------------|-------------------|------------|-------------|------------|-----|
| agcagatact gctct | gattt gccattaaaa  | tcttaaaaat | tcttaaaaaag | ctctcttgaa | 120 |
| ttcgacctct actac | ecttcc aaggaccttg | gaaagactta | agtatgtgtt  | agaactctct | 180 |
| tgaaggcttg gtctt | ccttt agtgacatta  | acactcaggt | ttgttattcc  | agtgggcagc | 240 |
| cccagttcat gcaaa | ctgac ctgttgtgtc  | tggtgtcctt | agactttgat  | atgcaggcca | 300 |
| aagtccaagg gatat | gcaaa cataacacac  | acctgtactt | ccataaaaac  | cagcagaatt | 360 |
| gtagatcagc tcatt | ttact gaaattttaa  | accctgtaaa | aaaaaaaata  | ctatgtttga | 420 |
| agaaagaaat cctgg | tgcat ataaaaacta  | caatgagtaa | cagtaataca  | ggtaagaatc | 480 |
| aagcaggcct tgagc | caaaac agtccattat | tactgcgtaa | actatgttgc  | tatgatactt | 540 |
| attttgagcc tttat | gcacc agcacataca  | tagtaagaca | cacaagatag  | ttcaacaaaa | 600 |
| tctaagtaat ataca | aacac tgtaagagct  | tttccaacca | aagaaacttt  | aatgtagatc | 660 |
| tgaaatgagc catca | itgata cagaaaaaga | tgattaccat | ttcgtgtcct  | ttccaagtag | 720 |
| aactatctga taaac | ettttc tggttgtatc | agaagagatt | tcaactcaac  | atgaaaattc | 780 |
| tactacttgg gaatt | atttg aaaaaatcaa  | gtatttgaag | gaaaaaatta  | tttttcatct | 840 |
| aaaggacgct tacat | tttcc ttttgctaga  | aacgaatgcc | atggatgan   | A          | 889 |

<210> 490

⟨211⟩ 723

<212> DNA

<213> Homo sapiens

<400> 490

60 ttttgttttg ttttcttgtt tttaacattt ccttcatcct ggtgaaatat cctggaaatt 120 catagatetg ggtttggtga tttcaaaact caccatgeec agtggeeatt teagttactg 180 ccgtgacatc cctgaggcta ccatactctc aaaaccaaat caatgccagt gatctaacag 240 gattettet tatttatgag ttttgtttag atggatattt ttgcagagca taaaaaatta 300 aatgacattt agttatccat tgaatgtatc accetgactt aaaaaaaaat cettaaatca 360 aaacttttca aaaaatctgg gctatggagt cactccctct gtggagcgag agcccagtct 420 tttctggtac taaggccaca gaggcaattt ccagtagcat ttttatatct tctctaagtt 480 540 tetttteett ttetgtetgt atetgttttt etetgaetge etatatetta etttgtatae ccatacataa attattttcc catcttctct cttccccttt ttttctgatt tgttttctct 600 660 cttgcaagaa actetgaaat aacetteaga acacaaaaaa etggaggtte tataeetaca gagtcattat cattattgng attaccattg ttactgntgn tggtgttttt cctcttttta 720 723 ttg

<210> 491

<211> 808

<212> DNA

<213> Homo sapiens

<400> 491

60 cttagtggtg tcggggtcta gtggacagag aagactcttg gccaggcaga tggcttctcg gtggcagaac atggggacct ccgtgcgccg gagatctctc cagcaccagg agcagctgga 120 180 ggacagcaag gagctgcagc ctgtggtcag ccatcaggag acctctgtag gggccctggg gtccctgtgc agacagttcc aaaggaggct gcccctgaga accgtcaacc tcaacctccg 240 300 cgcagggccc tcctggaaac gcctggaaac cccagagcca ggtcagcagg gcctccaggc tgcagctcgc tcagctaaga gtgctttggg tgccgtgtcc cagagaatcc aggagtcctg 360 420 ccaaagtggc accaagtggc tggtggagac ccaggtgaag gccaggaggc ggaagaggg 480 agcacagaag ggcagtggat ccccaactca cagcctgagc cagaagagca cccggctgtc 540 tggagccgcc cctgcccact cagccgcaga cccctgggag aaggagcatc accgcctctc

tgtccggatg ggctcacatg cccacccatt acggcgatca aggcgggagg ctgccttccg 600 gagcccctac tcctcaacag agcccctctg ctctccagc gagtctgaca gtgacctaga 660 gcctgtgggg gcgggaattc agcatctcca gaactgtccc aagagctaga tgaagccatt 720 atggcggaag anagtggtga catcgtctct ctcattcatg acttgaggaa gtgccttgca 780 ngaaaacaag ccctgtctgg accgncaa

<210> 492

⟨211⟩ 874

<212> DNA

<213> Homo sapiens

<400> 492

agaagatcta ggaaagaaga ttgctttggc cttgaacaaa gtggatggag ccaatgtggc -60 tettaaagae tetgaceaag tageacagag tgatggggag gagageeetg etgetgaaga 120 gcagctcttg ggagagcaca ttaaagagga aaaagaagaa tctgaatttc taccctcatc 180 tggaggaaca tttaatatet etgteagtgg ggacattgat ggtttaatta eteaggettt 240 gctgacggc aattttgaga gtgctgttga cctttgttta catgataacc gcatggccga 300 tgccattata ttggccatag caggtggaca agtactcttg gctcgaaccc agaaaaaaat. acttegeaaa ateecaaage aaaattaeea ggeteateae tgeagtggtg atgaagaaet 420 ggaaagagat tgttgagtct tgtgatctta aaaattggag agaggcttta gctgcagtat 480 tgacttatgc aaagccggat gaattttcag ccctttgtga tcttttggga accaggcttg 540 aaaatgaagg agatagcete etgeagaete aageatgtet etgetatatt tgtgeaggga 600 atgtagagaa attagttgca tgttggacta aagctcaaga tggaagccac cctttgtcac 660 ttcaggatct gattgagaaa gttgtcatcc tgcgaaaagc tgtgcaactc actcaagcca 720 tggacactag tactggagga gttctcttgc tgcgaanatg aatcagtatg cccatttgnt 780 ggcagctcaa ggcagtattg ctgcagcctt ggcttttctt cctgacacac caccagccaa 840 874 tatcatgccn ctttgtgaca gactttgtan accc

<210> 493

. <211> 834

<212> DNA

<213> Homo sapiens

<400> 493

| agacgatccg | ctagccacat | taggcgctcg | gtctctgcgt | ccgccctcc  | cgtgcctcag | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| agacttgcgc | tccccaggcc | cgagcccctg | tcggcccatc | ctcgagcccg | tgtggctcgc | 120 |
| gaacctctaa | ctccagccgc | tgcagccccc | tcccaggccc | ggcgtccccg | agccccgcgg | 180 |
| gcgccgcgcc | tgcccttctt | tggctacgct | gcagccgcgg | tgtcggcgag | tcctcccggg | 240 |
| ttgccccgc  | gggcgtcaga | gggagggcgg | gcgcccgcgt | ggtgacggcg | acgcctgcag | 300 |
| cccaaggagc | gctccactcg | ctgccgccgg | aggggccggt | gacctcttgg | ctacccgcg  | 360 |
| tcggaggctt | agatggctca | ggcgaagatc | aacgctaaag | ccaacgaggg | gcgcttctgc | 420 |
| cgctcctcct | ccatggctga | ccgctccagc | cgcctgctgg | agagcctgga | ccagctggag | 480 |
| ctcagggttg | aagctttgag | agaagcagca | actgctgttg | agcaagagaa | agaaatcctt | 540 |
| ctggaaatga | tccacagtat | ccaaaatagc | caggacatga | ggcagatcag | tgacggagaa | 600 |
| agagaagaat | taaatctgac | tgcaaaccgt | ttgatgggaa | gaactctcac | cgttgaagtg | 660 |
| tcaagtagaa | acaattagaa | accccagcag | caagaatccc | taaagcatgc | cacaaggatt | 720 |
| attgatgang | tggtcaataa | gtttctggat | gatttgggaa | atgccaagag | tcatttaatg | 780 |
| ncgcttctga | agtgcatggt | catctgaggt | gccacatggg | ccagnttggn | tcaa       | 834 |

<210> 494

<211> 823

<212> DNA

<213> Homo sapiens

<400> 494

attgtgggaa gggcggccgg tgcagccgca gctgccatct taggggcgcc tggcgctacg 60 ggtttctcgt tggaggcggc cttcgtggca gctgtagacg ccgggaaaag gcataaagtc 120 cgttggccga cacctttctt tcctccggcc tcggtagaac cgccagcccg cgtccgaagg 180

cggaggcgag gggaactggc cgcgtgaggg gcctgaggcg agcggttaga gcgtctcccg gaaggatggg ccggtctcgg agccggagct cgtcccgctc caagcacacc aagagcagca 300 agcacaacaa gaagcgcagc cggtcccggt cgcgatcccg ggacaaggag cgcgtgcgga 360 agcgttccaa atctcgggaa agtaaacgga accggcggcg ggagtcgcgg tcccgttcgc 420 getecaceaa caeggeegtg teeeggegeg agegggaeeg ggagegege tegteeege 480 ccgaccgcat cgacatcttc gggcgcacgg tgagcaagcg cagcagcctg gacgagaagc 540 agaagcgaga ggaggaggag aagaaagcgg agttcgagcg gcagcgaaaa attcgacagc 600 aagaaataga agaaaaactc atcgaggaag aaacagcacg aagagtagaa gaattggtag 660 caaaaagggt ggaggaagaa ctggagaaaa ggaaggatga aattgaacga gaagttctcc 720 gaagggtgga ggaagccaaa cgcatcatgg aaaagcagtt gctcgaagaa ctcgaaccga 780 caganacaag ctgaacttgn cggacaaaaa agcttganaa gga 823

<210> 495

<211> 752

<212> DNA

<213> Homo sapiens

## <400> 495

gcgcacgtcc cggagcccat gccgaccgca ggcgccgtat ccgcgctcgt ctagcagccc 60 120 cggttacgcg gttgcacgtc ggccccagcc ctgaggagcc ggaccgatgt ggaaactgct 180 gcccgccgcg ggcccggcag gaggagaacc atacagactt ttgactggcg ttgagtacgt tgttggaagg aaaaactgtg ccattctaat tgaaaatgat cagtcgatca gccgaaatca 240 tgctgtgtta actgctaact tttctgtaac caacctgagt caaacagatg aaatccctgt 300 360 attgacatta aaagataatt ctaagtatgg tacctttgtt aatgaggaaa aaatgcagaa 420 tggcttttcc cgaactttga agtcggggga tggtattact tttggagtgt ttggaagtaa atteagaata gagtatgage etttggttge atgetettet tgtttagatg tetetgggaa 480 aactgettta aateaageta tattgeaact tggaggattt aetgtaaaca attggacaga 540 600 agaatgcact caccttgtca tggtatcagt gaaagttacc attaaaacaa tatgtgcact 660 cattigigga cgiccaattg taaagccaga atattitact gaattcciga aagcagtica

| gtccaagaag | cagcctncac | aaattgaaag                            | tttttaccca | cctnttgatg | aaccatctat | 720      |
|------------|------------|---------------------------------------|------------|------------|------------|----------|
| tggaaagtaa | aaatgttgat | ctgtcangac                            | gg         | a · · ·    |            | .752     |
|            | ·          |                                       |            | •          |            |          |
| <210> 496  |            | • • • • • • • • • • • • • • • • • • • |            |            |            |          |
| <211> 465  |            |                                       |            |            |            |          |
| <212> DNA  |            |                                       |            |            |            | ٠.       |
| <213> Homo | sapiens    |                                       |            |            |            | <i>:</i> |
|            |            |                                       | ,          |            |            |          |
| <400> 496  |            |                                       |            |            |            |          |
| cttagtggtg | tcggggtcta | gtggacagag                            | aagactcttg | gccaggcaga | tggcttctcg | 60       |
| gtggcagaac | atggggacct | ccgtgcgccg                            | gagatctctc | cagcaccagg | agcagctgga | 120      |
| ggacagcaag | gagctgcagc | ctgtggtcag                            | ccatcaggag | acctctgtag | gggccctggg | 180      |
| gtccctgtgc | agacagttcc | aaaggaggct                            | gcccctgaga | accgtcaacc | tcaacctccg | 240      |
| cgcagggccc | tcctggaaac | gcctggaaac                            | cccagagcca | ggtcagcagg | gcctccaggc | 300      |
| tgcagctcgc | tcagctaaga | gtgctttggg                            | tgccgtgtcc | cagagaatcc | aggagtcctg | 360      |
| ccaaagtggc | accaagtggc | tggtggagac                            | ccaggtgaag | gccannaggc | ggaagagagg | 420      |
| agcacagaan | ggcagtggat | ccccaactca                            | cagcctgagc | cagaa      |            | 465      |
|            |            | •                                     |            |            |            |          |
| <210> 497  |            |                                       |            | •          |            |          |
| <211> 830  | • •        |                                       |            |            |            | ٦        |
| <212> DNA  |            |                                       |            |            |            |          |
| <213> Homo | sapiens    |                                       |            |            | •          | •        |
|            |            | •                                     | •          |            |            | ,        |
| <400> 497  |            |                                       |            |            |            |          |
| ttcagaaggc | cagccggcag | gaggagccgg                            | acagcctctc | ctattactgc | gctgctgaga | -60      |
| ccaacggggt | gggtgcagcc | tcgggcaccc                            | cgccctccaa | ggctaccctg | gaggggaagg | 120      |
| tggcttcccc | caagcactgt | gttctggctc                            | ggcccaaagg | gactcccct  | ctgcccctg  | 180      |
| tccgaaagtc | cagcctggac | cagaagaacc                            | gggccagccc | tcagcacagt | gccagcggca | 240      |

geggeaecag eageecetg aaccaaccag eegeetteee ggegggeete eeagaegage 300

ctagcggcaa gacgaaggac gccagcagca gcagcaagct cttcagtgcc aagctggagc agctggccag cagaagcaac tcgctgggca gggcgacggt cagccactac gaatgcctct 420 ccccggagcg ggccgagagc ctgtcctccg tgagctcccg gctgcacgcg ggcaaggacg 480 gcaccatgcc ccgcgcggg aggagcctgg gccgcagcgc cgggacctcg cccccagct 540 ccggggcctc gcccaaggcc ggccagtcca agatctccgc cgtgagcaga ctcctcctgg 600 660 ccagccccag agcgcacggn ccgtccgcct ccaccaccaa aaccctcagc ttctccacca agtocotgoe geaggeggtg ggeeaggget teagetegee eeeeggtggg aageaeaege 720 cetggteeac geagtneett cageaggaac aggaagette ggeetggget teaaagettt 780 cccttgcggg gccgtcaagc ngggcgcatc ttcggaactt gcttcanggt 830

**<210> 498** 

⟨211⟩ 847

<212> DNA

<213> Homo sapiens

## <400> 498

tttccatggg cagggtcgac agactccctt ttcagtgatt tctggctctg agaaacctct ttactcacta gaaaagaact ttatttaaat ggccaatttt gttcctcaga aaaagaaatt 120 aaaaaaaaag aaaaatagga tactgaagac agaaccatgt gacttggtga caaacaaaag 180 gagggtgca ctagaatttc aataggctcc ctaattccat agaaaaagca aagcaaccca 240 atgectectg agectgeagt geatgaagag agtgettgag etgaceeage caecaggeet 300 360 tetggggeta gacataaett eecaetggaa eageageage etettteece tetttgtgtt 420 ttcatgaaga aaacggctgt tctcttaggt agccaggaaa tagattacat ggggcaaact 480 ttcaaaagca atctctaccc tggtgctcag gctacataca gaggcagaaa aggggcacgg aagageeett getettgaga gagagtattt teatatteee aagggettte egtgtagagt -540 tgctatttct gatatcactt aaacctttac aagaaaaaag gctgtggtga ctcagtgttc 600 660. ctataaattc agaatgtgga aactactaat ccaaagcatc acttctagca ctgagtatca 720 agacgatcag cctgaccaaa atattgcaaa gagttttcta agtctctgaa gatttttttc tnettgaaca etgagtetat ageagteage aatgteetta eeegateeet ggggaatggg 780

| •          |            |            | * *        |            |            |     |
|------------|------------|------------|------------|------------|------------|-----|
| tatggaacag | taagggcttg | gttccatccn | ttttagagtg | aagagatnga | aaattagggc | 840 |
| tacctan    |            |            |            | •          | • .        | 847 |
|            |            |            |            |            |            | ••• |
| <210> 499  | · · ·      |            | •          |            |            |     |
| <211> 819  |            | ,          | -<br>-     |            |            |     |
| <212> DNA  |            |            |            | •          | <b>.</b>   |     |
| <213> Homo | sapiens    |            |            |            |            |     |
| <400> 499  |            |            |            |            |            |     |
| gtcataaaca | agccatgcaa | ggtttcaagc | tctacatgcc | acggggtcgg | tactggcggc | 60  |
| ttcgtctctg | tcctgaacct | cccagtgctc | ctagtgagta | tgctggttta | gtggtccgca | 120 |
| ccgtactgga | gcctgtgttg | caaggattgc | aagggttgcc | acctcaagcc | caggcccctg | 180 |
| cccttggtca | ggctctgacg | gccatcgtgg | gtgcctggct | tgaccacatt | cttacccatg | 240 |
| ggatttggtt | cagcotgoag | ggagcgctgc | ageteaaaca | agactttgga | gtggtcaggg | 300 |

agttgctgga agaggagcag tggagcctgt cccctgatct ccgccagacc ctgctcatgc

tcagcatctt ccagcagctg gatggggccc tgctgtgtct gttgcagcag cccctgccca

agteteaagt ceacaggagg ecceetgtt getgtgagtt acteeette geteactget

ttgtgtgtcc caaaccctat tctcaccatt aatctggctt cagtatatcc ccagcagcca

cagcagetge etcaatagee tggagagett ggageeeeg etceageetg gaacatetne

agcccagaca ggtcanctgc aaagcacact aggaggaagg ggacctagcc cggagggcta

cctggtggga aaatcagcag gcctggcttg gcctnaggca acaccaagcg aaccccgttg

gnaccctggc cgttttttc cttgccttgg ggaanccag

cctaccttcc actectgect taccaggtge ttgtcaggag gtccagacca cgaaattgee 600

<210> 500

<211> 711

<212> DNA

<213> Homo sapiens

420.

480

540

660

720

780

819

# <400> 500

| atgcagcaga | tccgcccgcc | cttcatccgc | gggcctccgc | accatgcctc | caaccccaac | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| agccccctgt | ccaaccccat | gcttcccggc | atcgggcccc | cgcccggtgg | ccccagaaac | 120 |
| ctgggcccca | cttccagccc | catgcaccgg | cccatgctat | cgcccacat  | ccaccccccg | 180 |
| agcaccccca | ccatgcccgg | gaacccccca | ggcctgctgc | ccccgccgcc | tccgggcgcc | 240 |
| ccactgccga | gtcttccctt | cccgccagtg | agcatgatgc | caaatggccc | gatgccggtg | 300 |
| ccccagatga | tgaatttcgg | gctgccgtcg | cttgccccgc | tggtgccgcc | cccgaccctg | 360 |
| ctcgtgccgt | accccgtgat | cgtgccccta | ccggtgccca | tccccatccc | catccctatc | 420 |
| cctcacgtca | gcgactccaa | gcccccaag  | aagctgctgt | cgcctgagga | accggcggtg | 480 |
| agcgagctag | agtcggtcaa | ggagaataac | tgtgcttcaa | ctgccacctg | gacggggagg | 540 |
| cggcaaaaag | ctgatgggcg | aggaggccct | ggcggggggc | gacaagtcag | acccgaacct | 600 |
| taataacccc | gcggacgagg | accatgccta | tgctctgcgg | atgctgccaa | gaccggctgn | 660 |
| gtgatccagc | ctgtgcaaaa | cccgcggaga | angctgcatg | gnaccgtgca | t          | 711 |

<210> 501

<211> 840

<212> DNA

<213≻ Homo sapiens

# <400> 501

| ttgccagcta | tccacctcag | agtggatatg | ctaacaggga | tgtactaaaa | attgcaaaca | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| ttgaaggctt | ctctaatccc | agatacacaa | caaaatacca | tccaagacca | taccacacag | 120 |
| agacttccaa | ggccatcctt | ggaaaaatgg | agaagtagaa | ggccccatt  | attttatttt | 180 |
| atttttattt | ttttgagatg | gagtctcgct | ctttcaccca | ggctggagtg | cagtggcgcg | 240 |
| aacttggctc | actgcaagct | ctgcctcctg | ggttcaagcc | attctcctgc | ctcagcctcc | 300 |
| tgagtagctg | ggactacagg | tgcccatcac | caggcccggc | taatttttt  | gtatttttag | 360 |
| taaagacagg | gtttcaccat | gttagccagg | atggtctcga | tctcccgacc | tcataatccg | 420 |
| cccgcctcag | cctcccaaag | tgctgcgatt | acaggcgtga | gccaccgcgc | cttaaggccc | 480 |
| ccattcttaa | ctgttaactc | ctgaattggg | gatttctgtc | aatctagcag | aaactccaaa | 540 |

aggattetet gtactagaac ettgattgte tgateacee tgtttettat ttttettatt 600 tttaggeatt aatteeaaaa acateeatea gacagacatt taggaagtgt tetttetata 660 caacagagac ttggacaggt gaateagace acagteettg gtteattaag tttteaattt 720 tggaagggga aggaaaggag aatgagacag ecaaaaactt ggetaactgg tactgaagtg 780 atgggtgang acaggagaca gageenttaa ttetgetgga etageagatg gggnetttea 840

<210> 502

<211> 745.

<212> DNA

<213> Homo sapiens

<400> 502

| ggctcctccc co | caccggcct | tcaccttttg | ttccctatcc | tgggccagtt | ctctcgcagg | 60           |
|---------------|-----------|------------|------------|------------|------------|--------------|
| tcccagatgt co | cagttccag | atgcctggac | ccagagtgtg | ggggaaatat | ctctggagaa | 120          |
| gccctcactc ca | aaaggctgt | ccaggcgcaa | tgtggtggct | gcttctctgg | ggagtcctcc | 180          |
| aggettgeec aa | acccggggc | tccgtcctct | tggcccaaga | gctaccccag | cagctgacat | 240          |
| ccccgggta c   | ccagagccg | tatggcaaag | gccaagagag | cagcacggac | atcaaggctc | <b>3</b> 00. |
| cagagggctt tg | gctgtgagg | ctcgtcttcc | aggacttcga | cctggggccg | tcccaggact | 360          |
| gtgcagggga ct | tctgtcaca | atctcattcg | tcggttcgga | tccaagccag | ttctgtggtc | 420          |
| agcaaggctc co | cctctgggc | aggccccctg | gtcagaggga | gtttgtatcc | tcagggagga | 480          |
| gtttgcggct ga | accttccgc | acacagcctt | cctcggagaa | caagactgcc | cacctncaca | 540          |
| agggcttcct gg | gcctctacc | aaaccgtggc | tgtgaactat | agtcagccca | tcagcgangc | 600          |
| cagcangggc to | ctgaggcca | tcaacgcacc | tggagacaac | cctgccaagg | tcagaccact | 660          |
| ggcaggagcc ct | tattatcag | gccgnggcag | caggggcact | cacctgtgca | ancccaggga | 720          |
| cctggaaaga cr | ngacaggat | gggga      |            |            |            | 745          |

<210> 503

<211> 812

<212> DNA

# <213≻ Homo sapiens

# <400> 503

| agcaaagagc | cgaggccggg | cgcgcgaccc | tcgtccttct | gcccctggcc | gcacactttg | -60 |
|------------|------------|------------|------------|------------|------------|-----|
| cgcacatctc | tttttctgca | tggtggatat | tatttttcat | tatccttttc | tgggtgctat | 120 |
| gggtgatcat | tccaagaaga | agcccgggac | ggccatgtgc | gtgggctgcg | ggagtcagat | 180 |
| ccacgaccag | tttatcctgc | gggtgtcgcc | cgacctcgag | tggcacgcgg | cctgcctcaa | 240 |
| gtgtgccgag | tgcagccagt | acctggacga | gacgtgcacg | tgcttcgtga | gagacgggaa | 300 |
| gacctactgc | aagcgggact | acgtcaggct | gttcggcatc | aagtgcgcca | agtgccaggt | 360 |
| gggcttcagc | agcagcgacc | tggtgatgag | ggcgcgggac | agcgtgtacc | acatcgagtg | 420 |
| cttccgctgc | tccgtgtgca | gccgccagct | gctgcctggg | gacgagttct | cgctgcggga | 480 |
| gcacgagctg | ctctgccgcg | ccgaccacgg | cctcctgctc | gagcgcgccg | cggccggcag | 540 |
| cccgcgcagc | cccggnccgc | ttcccggcgc | ccgcggnctg | catctgcccg | acgctgggtc | 600 |
| gggccggcag | cccgcgttgc | gccccgcacg | tgcacaagca | gacggagaag | acgacccgcg | 660 |
| tgcggactgt | gctgaacgag | aagcagctgc | acactctgcg | gactgctacg | ccggcaaccc | 720 |
| gcggccgacg | ctntcatgaa | ggagcacttg | tggagatgac | cggnctgagc | ccccggggca | 780 |
| ttccgcgttt | ggttccanaa | caagcgcttg | aa ,.      |            |            | 812 |

<210> 504

**<211>** 792

<212> DNA

<213> Homo sapiens

# <400> 504

| tctaaaattc | ctataatttt | ttgctgcata | ttatcctcat | ccccaaaata | acatccattt | 60  |
|------------|------------|------------|------------|------------|------------|-----|
| taaagtgtat | agttgagggg | aaggatgctg | tttttggtat | aagttgtcaa | atatggaaca | 120 |
| tttgacctgg | agagggctaa | aatcaatatt | taatcctcag | agcttcacct | gtcaaaacta | 180 |
| tttaagtctg | cagaaaatca | agattgaaat | gaaaactacc | aaccagctga | acatccaaaa | 240 |
| cgtcaaattc | cttaacatga | tgtaaaaaat | gtaagctaaa | aggaattagt | ccattttgat | 300 |

agcagcaata gagagccctg tgtattcgta ttcgactttc atggaaaggt tcttctgtgg 360 caagaccacc tgtggaacta gtacctaaac acacagattt gttttatttt agagcttcac 420 aatttgagat ctcaaaatac aaaacctaat aaggctgaaa cacagggtct atgaaggcta 480 agaacccaca ttaattcaaa aagttgacac agctaaacat cttacaagca tgaggtgaga 540 actgcagaaa ccaaagctgt gctaacatct cacctctact gctttgatgt gatctagatg 600 cacagttage tteagtgtgg ecegttatet aatagaacea tettteaagg etttteatta 660 720 gaaatgacaa aaagccagtt gctctggctg tgtggcttca gaggcacatt tncagntaat cagtacaacc aaagtcaacc taatagttga ctggnattta atttatttta atttactttt 780 792 attatagaac ta

<210> 505

**<211>** 726

<212> DNA

<213> Homo sapiens

## <400> 505

cttcgctcta gctgggaggc tgacggcccg cgggcgtaag cggactgcag ccgcgagctc 60 ctggaggcgg cgggatggag gcggcggccg agcctggaaa cctggccggc gtcaggcaca 120 tcatcctggt cctctcagga aaggggggcg ttgggaaaag caccatctcc acggagctgg 180 ccctggcact gcgccatgca ggcaagaagg tgggaatcct ggatgtggac ctgtgtggcc 240 ccagtatacc ccgcatgctc ggggcgcagg gcagggctgt gcaccagtgc gaccgcggct 300 gggcacccgt cttcctggac cgggagcaga gcatctcgct catgtctgtg ggcttcctgc 360 tggagaagcc ggacgaggcc gtggtgtgga gaggccccaa gaaaaacgcg ctgataaagc . 420 agtttgtgtc cgacgtggcc tggggggagc tggactacct ggtggtggac acgcccccgg 480 ggacctccga tgagcacatg gccaccatag aagccctgcg tccctaccag cccctggggg 540 ccctcgtggt caccacgccc caggcggtgt ccgtggggga cgtgaggcgc gagctgacct 600 tetgtaggaa gaeggettge gggtgatggg aategtggag aatatgageg gtteaetgee 660 720 acactgacga tgaccacgtt ttcaggcgcg aaagactgcc antngcggtg ctntagtcgc 726 ctgact

<210> 506

<211> 762

<212> DNA

<213> Homo sapiens

<400> 506

| ataaaaagaa | tggctttgca | ctgagcagct | cagtctactg | gtctcatcag | tgaaaggctt | . 60 |
|------------|------------|------------|------------|------------|------------|------|
| gtgaaaattt | ctggaaagag | cattggctgg | cttgttcatc | tctctgtttg | gtcagttgct | 120  |
| gtgtttctgc | cggatcagat | gagcagattg | gttagtgaag | gtcagtgtga | gaagaagatt | 180  |
| gtttctgagc | ttgagaagct | tctggaggat | tgaagagtat | ttgaagtctg | tgtcaaacat | 240  |
| ccacatcata | agtggaattt | tggagatatt | caaagaatgc | tgtcagaagg | gtatctcagt | 300  |
| ggacttgagt | actggaatga | catccactgg | agttgtgcct | cttataatga | gcaggtggct | 360  |
| ggggaaaagg | aagaggagac | aaattctgtt | gctacccttt | cctattcctc | tgtggatgaa | 420  |
| acacaagtca | gaagteteta | cgtgagctgc | aaatcatctg | gcaagtttat | ctcttcagtg | 480  |
| cattcaagag | agagccaaca | tagcagaagt | cagagagtca | cagtgctgca | gacaaacccc | 540  |
| aatcctgtgt | ttgaaagccc | aaacttggct | gcagttgaaa | tatgtanaga | tgccagcaga | 600  |
| gagacctact | tggttccatc | ttcttgcaaa | agtatttgca | agaactataa | tgacttacag | 660  |
| attgcagggg | gccaggtgat | ggncattaat | tcagtgacac | cagattttcc | tctgagagca | 720  |
| gttttgaata | tggccctttg | cttgaaanca | ttctganaat | cc         |            | 762  |

<210> 507

<211> 7.86

<212> DNA

<213≻ Homo sapiens

<400> 507

ctcggaccaa gcctcgggag ctaagccaga tctgccagtg agcctcaggc tttaggaact 180 gaagagtgtt tetgaaagat etateeagea eteegatgge eageaacaac acegeeagea 240 tagcacaagc caggaagctg gtagagcagc ttaagatgga agccaatatc gacaggataa 300 aggtgtccaa ggcagctgca gatttgatgg cctactgtga agcacatgcc aaggaagacc -360ccctcctgac ccctgttccg gcttcagaaa acccgtttag ggagaagaag tttttctgtg 420 ccatccttta agtctttgag aggggcctga agagcctccg ggctcctggg acattgatgt 480 agagttttta gtgaagtggg cacctttcta gtccacggca tttgaagaga gcgaggagaa 540 ccattctgga aactctaggc tatgcatgtt taaagatctg gtccccttta tgagaatgca 600 agcegateca catectgaet taagagatet gattetgaeg aactgetgga ggangggaat 660 atataaaaat aaaattggtg tcacttcttt tctgctatcc ccaagccccc cccccaaaa 720 tcctcatggt tctgcttnat attttggaaa ataaccatta aaacagacag ntgtactgag 780 786 gtaana

<210> 508

<211> 860

<212> DNA

<213> Homo sapiens

## <400> 508

acaccatgcc gactgtcage gtgaagegtg atetgetett ccaagecetg ggccgcacet 60 acactgacga agaatttgat gaactatgtt ttgaatttgg tctggagctt gatgaaattg  $\cdot 120$ ctccgtagaa tttgngacag ccctggctga cctccgagca gaggctagct gtcccatctg 180 tetggaetae ttgaaagace cagtgaecat cagetgtggg cataacttet gteteteetg 240 300 catcattatg teetggaagg atetagatga tagttteece tgeecetttt geeacttgtg 360 ctgtccagaa aggaaattta taagcaatcc ccagctgggt agtttgactg aaattgctaa gcaactccag ctaagaagca agaggaagag gcaggaagag aagcatgtgt gtaagaagca 420 taatcaggtt ttgactttct tctctcagaa agacctagag cttttatgtc caaggtgcag 480 tttgtccact gatcaccagc atcgctgngt ttggcccata aagaaggctg cctcctatca 540 600 cgaaaaaact ggagcaatac aatgcaccgt ggaaggagag agtggaacta attggaaaaa

gtcataacta tacaaaccag aaaatcactg gaactgaaga aaaaggtaaa acatacggca 660 gaagaagtca agtctgaatt ttgagcaact tagggtattt ctgcaaaatg agcangagac 720 tggtttgggc aattacaaga tgacgagatg gatattttag cacaactaaa tgaaagccta 780 ccaaantttn agatatcctc tcattaaata tctactaaga gatagagagn tatatgtgaa 840 gcagactgga atactggctg

<210> 509

<211> 678

<212> DNA

<213> Homo sapiens

<400> 509

tcgggctccg cgggcggcg ggcggacatg gcggccaaca tgtaccgggt cggagattat gtctactttg agaattcctc cagcaaccca tacctaataa gaaggataga agaactcaac 120 aagactgcaa gtggcaacgt ggaagcaaaa gtagtatgct tttatagacg acgtgatatt 240 tccaacacac ttataatgct cgcagataag catgctaaag aaattgagga agaatctgaa acaacagttg aggctgactt gaccgataag cagaaacatc agttgaaaca tagggaactc 300 tttttgtcac gccagtatga atctctgccc gcaacacata tcaggggaaa gtgcagtgtt 360 gcccttctga atgagacaga atcagtattg tcatatcttg ataaggagga taccttcttc 420 tactcattgg tctatgaccc ctcattgaaa acactattag ctgacaaagg tgaaatcaga 480 gtgggaccta gatatcaagc agacattcca gaaatgctgt tagaaggaga atcagatgag 540 600 agggaacaat caaaattgga agttaaagtt tgggatccaa atagcccact tacggatcga 660 cagattgacc agtttttagt tgtagcacgt gctgntggga cattcgcaga nccctggatt 678 gcagcagtct gtgangca

<210> 510

<211> 769

<212> DNA

<213> Homo sapiens

## <400> 510

ttttttttt ttaactigaa tigatagiig gittataaic ciggagiigt ataigilagg gtttgctatt gagaagtata ggagtgtatt aactctgata aatgaagtgg gctaattagt 120 attteagttt aattttetge aattgeattt aagtttgtga teagttettt teteeteaet 180 gtataacttt ttcctgaaga tttgtataat tattagtggt aaaaactcca tcttagttgc 240 ttatgatttt aatgtcaatt tgaggaagat atcaccatat agaaaatact tagaagtagc 300 360 ttattttaaa aatattcatt tgcttttctt ccaaacacgt ggtcacttag caagcagtga ttcaattatt catagiccic agiatttaig taaigccaaa gaagiggaag aaggggaagi 420 480 gaagtgagaa aggaaattag gcagacaagt gaatcagagg gcaagagaaa tgagtaatgc aaaaggggaa ggaaatgatg gtcagagcac acatgccttg cagcatgagc aaagaaaatg 540 tgctaaacaa aactacagtc agaatcatag aaaggataag gttttagaga ggttttgttg 600 ttttttaaac attcatgtga gctaaatata atgcaggtat tgaaatgatt actgcagata 660 720 tgccagatga ccttgatate tattttcatg ttaatettet ggtatttggt ggtgntgaat 769 tggtacccc acgttttacc tgngtaagtg aattgaaata ttcaaggnc

<210> 511

<211> 802

<212> DNA

<213> Homo sapiens

#### <400> 511

taacaaatca tticgtatta ggitccatta aaatgtcatt cctttgaaaa ggcaagggat 60
ttccacttc agaatttgaa aatgaaagta gcatgtttat ctaaaggcag aaaatagttc 120
ggacttggta ttatgaaaat aagtaatggt ttctggagag gatttgtta gatttgcaca 180
gatggcgatg gcacctttta cttaaattaa cattaatcaa cagtgctaag gaaaatttac 240
acaaaattac aagataaaac atggaaatgt gtgcctttca gtatacaaac tcttgcttgg 300
tggccatttg ggtaatcaga ccatttgaat gcctgagagc atgtttaatt tctgtggagt 360
gccacatatg gctaaaacaa ctctttaatg tgcaattaat ttctagagta aaatgtctgt 420

tatgtgaggg ggatctttat gttgggcttt tctattttt aaatgttcac atttcttct 480 gttaattaaa tgccatcata atgtcacatt tacactgttg cctctttaa aagcaaagcc 540 actttcttgt tctaagatta catcaagact tgagcagtgt gtagtaatta aaatgtgtgc 600 ttaatgagca taatagattc tggttttagg aaataacata tagcttttat atgaatattt 660 tcttttgcta taatgaaagt cacagatttt tttttcctg cttttatgga ggaatgaaaa 720 gagttggctc cctctaagag tatactattt ttgatctcat agcataatgn cnccttctta 780 tcnaagggaa atcccctgg at

**<210> 512** 

<211> 782

<212> DNA

<213> Homo sapiens

## **<400> 512**

tatgcacagg cacacaagaa ttgtgggcag atgagtgaga ttgaggccaa ggtccgctac gtgaagctag cccgttctct caagacttac ggtgtctcct tcttcccggt gaaggtaggt 120 tatggaccet tttcactgcc etcettgttt eccactettg ccettttctg tetetgaaag 180 tototggcot tgccctcagt cacatotece accattecet aagatteeca ttetetteet 240tgetetgace teatgaaaac etgeetgtea teagecetae accaecaett ecetecetae 300 cetgeattit ecettgiceg tragecetee eggecacete aacateeeet atggetgeaa 360 getgatetga teatteacet eteattigae ettigaeetg taacaccaac accaacetet 420 geeteatagg aaaaaatgaa agggaagaac aagetagtge eeaggettet gggcatcace 480 aaggagtgtg tgatgcgagt ggatgagaag accaaggaag tgatccagga gtggaacctc 540 accaacatca aacgctgggc tgcgtctccc aaaagcttca ccctggtaag tctggggact 600 ataacaagaa agtgctttgg gagtttcatt aaaggggcag ctgcagaggt ctcttccctc 660 tettggggta agtatactga gtattactne agaaaaaaag gaggntagag tagatggaga 720 atcttcctct ggggaaantg tgaaggcttt aaaatggaaa accggatgaa tggacttaat 780 782